

**U.S. ARMY CORPS OF ENGINEERS  
CIVIL WORKS PROGRAM**

**CONGRESSIONAL SUBMISSION  
FISCAL YEAR 2006**

**SOUTH ATLANTIC DIVISION**

**7 February 2005**

Justification of Estimates for Civil Function Activities  
Department of the Army, Fiscal Year 2006  
SOUTH ATLANTIC DIVISION

Table of Contents

	Page No.
Summary South Atlantic Division Surveys	
Allatoona Lake Watershed, GA .....	9
Augusta, GA .....	3
Brewton and East Brewton, AL .....	2
Currituck Sound, NC .....	13
Edisto Island, SC .....	7
Hancock County, MS .....	6
Indian, Sugar, Intrenchment & Federal Prison Creeks, GA .....	10
John H. Kerr Dam and Reservoir, VA & NC .....	5
Long Island, Marsh and Johns Creeks, GA .....	11
Neuse River, NC .....	4
Reedy River, SC .....	14
Savannah Harbor Ecosystem Restoration, GA .....	12
Village Creek, Jefferson County (Birmingham Watershed), AL .....	8
 Preconstruction Engineering and Design	
Savannah Harbor Expansion, GA .....	15-16
 Construction, General	
Arecibo River, PR .....	45-49
Buford Powerhouse, GA .....	106-110
Hartwell Lake Powerhouse, GA .....	111-115
Herbert Hoover Dike, FL .....	97-101
John H. Kerr Dam & Reservoir, VA & NC .....	121-125
Portugues and Bucana Rivers, PR .....	50-58

## Table of Contents (continued)

Construction, General (continued)	Page No.
Richard B. Russell Dam and Lake, GA & SC .....	64-69
Rio Puerto Nuevo, PR .....	59-63
Roanoke River Upper Basin, NC .....	39-44
South Florida Everglades Ecosystem Restoration, FL .....	70-96
Tampa Harbor, Big Bend, FL .....	17-21
Thurmond Lake Powerhouse, GA & SC .....	116-120
Walter F. George Powerplant, AL & GA .....	102-105
Wilmington Harbor, NC .....	22-30
Wrightsville Beach, NC .....	31-38
 Operation and Maintenance .....	 126-139

Justification of Estimates for Civil Function Activities  
Department of the Army, Corps of Engineers  
Fiscal Year 2006

SUMMARY SOUTH ATLANTIC DIVISION

	<u>FY 2005 Allocation</u>	<u>FY 2006 Request</u>	<u>Increase or Decrease</u>
<u>General Investigations</u>			
Surveys	\$ 5,105,000	\$ 5,016,000	- \$ 89,000
Preconstruction Engineering and Design	\$ 956,000	\$ 800,000	- \$ 156,000
Subtotal General Investigations	(\$ 6,061,000)	(\$ 5,816,000)	(-\$ 245,000)
<u>Construction, General</u>			
Construction	\$ 216,173,000	\$ 223,223,000	+ \$ 7,050,000
Major Rehabilitation	\$ 29,003,000	\$ 30,933,000	+ \$ 1,930,000
Dam Safety Assurance	\$ 3,376,000	\$ 0	- \$ 3,376,000
Subtotal Construction, General	(\$ 248,552,000)	(\$ 254,156,000)	(+ \$ 5,604,000)
<u>Operation and Maintenance, General</u>			
Project Operation & Maintenance	\$ 290,530,000	\$ 321,571,000	+ \$ 31,041,000
Subtotal Operation and Maintenance	(\$ 290,530,000)	(\$ 321,571,000)	(+\$ 31,041,000)
GRAND TOTAL SOUTH ATLANTIC DIVISION	\$ 545,143,000	\$ 581,543,000	+ \$ 36,400,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006  
Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
SURVEYS - Continuing					
b. Flood Damage Prevention Studies					
Alabama					
Brewton and East Brewton Mobile District	787,000	489,000	109,000	189,000	0

The study area is in Escambia County in the south central part of the state of Alabama. It is a part of the Escambia-Conecuh River Basin. Because of rapid growth in the area, considerable development has occurred. This commercial, industrial, and residential expansion in and adjacent to the flood plains in the Brewton and East Brewton area has resulted in recent widespread flood problems. The March 1998 flood and the September 1998 Hurricane Georges flood resulted in extensive loss of property including water lines, roads and bridges, wastewater systems, residences and automobiles. Discussions with the City of Brewton and Escambia County officials indicate an urgent need to conduct a study of the area, focusing on identifying flood damage problems. The study will include investigations of alternatives to reduce flooding along Burnt Corn and Murder Creeks. The City of Brewton is the non-Federal sponsor and understands the requirements for study cost sharing. The Feasibility Cost Sharing Agreement was executed in May 2002.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2006 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$1,350,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,462,000
Reconnaissance Phase (Federal)	112,000
Feasibility Phase (Federal)	675,000
Feasibility Phase (Non-Federal)	675,000

The reconnaissance phase was completed in May 2002. The feasibility study completion date is September 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006  
Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Georgia					
Augusta Savannah District	1,974,000	1,700,000	74,000	200,000	0

The study area is Richmond County and areas contiguous to it. Richmond County is located in the northeastern part of the state of Georgia and comprises an area of approximately 326 square miles. It is located on the West Side of the Savannah River and is part of the Savannah River Basin that comprises about 11,000 square miles. The economy of the study area is highly diversified, including industry, agriculture, and maritime. It is the trade center for 13 counties in Georgia and 5 counties in South Carolina. Because of the rapid growth of the unincorporated areas, considerable development has occurred in the flood plains of the streams in the study area. This commercial, industrial, and residential expansion in and adjacent to the flood plains in the Richmond County area has resulted in recent widespread flood problems occurring in many parts of the county. The 12 October 1990 flood resulted in the loss of four lives and thousands of people were left homeless. Damage estimates, including damages to water lines, roads and bridges, wastewater systems, a hospital, the Augusta National Golf Course, residences and automobiles, exceeded \$47 million. The reconnaissance study conducted in Fiscal Years 1998 and 1999 was focused on flooding of public property and residential areas. It included reviews of previous assessments, development of a preliminary array of alternatives, and conducting economic, engineering and environmental analyses to determine which areas warrant further study. The Phase I study identified several flood control alternatives that are concentrated in two water basins in Richmond County. These alternatives have been identified for Rocky Creek and the Augusta Canal Basins. The Feasibility Cost Sharing Agreement with the local sponsor, Augusta - Richmond County, was executed in November 1999 and amended FCSA will be required for completion of the feasibility study for the Phase II work in Raes Creek Basin. This will complete the feasibility phase for the Augusta Richmond Flood Control Project.

Total Estimated Study Cost	\$3,848,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,874,000
Feasibility Phase (Non-Federal)	1,874,000

The reconnaissance phase was completed in November 1999. The feasibility study is scheduled for completion in August 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006  
Division: South Atlantic Division

Study	Total Estimated Federal Cost	Allocation Prior to FY 2005	Allocation FY 2005	Tentative Allocation FY 2006	Additional to complete After FY 2006
North Carolina	\$	\$	\$	\$	\$
Neuse River Basin Wilmington District	1,122,000	215,000	95,000	260,000	552,000

The study area is located in the eastern part of North Carolina. The Neuse River Basin amounts to about 11 percent of the entire State of North Carolina and consists of all or portions of 16 counties. The basin is roughly oblong in shape, approximately 180 miles long, with a maximum width of about 46 miles. The Neuse River is formed by the confluence of the Eno and Flat Rivers, about 8 miles north of the city of Durham, and has a drainage area of approximately 5,710 square miles. The basin is primarily an agricultural region, but contains many small towns and several cities which are important commercial centers. Considerable flooding occurred during and after Hurricane Fran below Smithfield where the flood plain is broad and flat. The City of Kinston suffered the most flooding damages. Estimated flood damages from Hurricane Fran below Falls Lake amounted to \$17,300,000 at September 1996 price levels and October 1993 levels of development. The estimated damages would have been \$275,700,000 without Falls Lake in operation. This entire area suffered significant damages as a result of Hurricane Floyd in 1999. Total flood damages were in excess of \$297,000,000. There have also been considerable water quality problems due to high levels of nutrients, particularly nitrogen. This has resulted in severe impacts to fisheries. The feasibility study will include a comprehensive plan to address measures to improve flood control, ecosystem improvements, environmental protection and restoration and related purposes. The sponsor is the State of North Carolina and they understand the cost share requirements of the feasibility study. The Feasibility Cost Sharing Agreement was signed on 9 May 2002.

Fiscal Year 2005 funds will be used to continue the feasibility phase of the study. Fiscal Year 2006 funds will be used to continue the feasibility phase including problem identification and identification of environmental restoration and flood control opportunities. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,122,000
Reconnaissance Phase (Federal)	122,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase was completed in May 2002. The feasibility study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

Division: South Atlantic Division

	Total Estimated Federal Cost	Allocation Prior to FY 2005	Allocation FY 2005	Tentative Allocation FY 2006	Additional to complete After FY 2006
Virginia and North Carolina	\$	\$	\$	\$	\$
John H. Kerr Dam and Reservoir	1,675,000	371,000	230,000	600,000	474,000
Wilmington District					

John H. Kerr Dam and Reservoir is located in the Roanoke River Basin which extends into north-central North Carolina and south-central Virginia. The project was completed in 1952 and provides hydropower, flood control, water supply, and recreation. Two downstream non-Federal hydropower reservoirs, Gaston and Roanoke Rapids, operated by the Dominion Power Company, have minimal active storage for daily hydropower peaking. The Kerr, Gaston and Roanoke Rapids projects operate cooperatively generating power, controlling flooding, and ensuring adequate downstream flows. The lower Roanoke River basin is one of the finest remaining swamp forest ecosystems within the eastern United States. These bottomland hardwood forests, wetlands, uplands, and streams provide a high quality habitat for fish and wildlife, including waterfowl. Federal and State agencies have expressed concern that there is a probable correlation between fish kills and low dissolved oxygen in the lower Roanoke River Basin and the operation of Kerr Reservoir. Resource concerns for the Lower Roanoke center on the need for restoration and enhancement of extensive swamp and flood plain forests and fisheries through improvements to the hydrologic regime. The State of North Carolina and the Commonwealth of Virginia are the sponsors and they understand the cost share requirements on the feasibility study. The reconnaissance report was approved in May 2001. The Feasibility Cost Sharing Agreement was signed on 17 June 2003.

Fiscal Year 2005 funds will be used to continue the feasibility phase of the study. Fiscal year 2006 funds will be used to continue the feasibility phase including identifying model requirements, and activities to complete fish, wildlife and sedimentation studies. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,175,000
Reconnaissance Phase (Federal)	175,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase was completed in June 2003. The feasibility study completion date is to be determined.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2006  
Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
c. Shoreline Protection Studies					
Mississippi					
Hancock County, MS	805,000	347,000	150,000	308,000	0
Mobile District					

The study area is located along the Gulf Coast in western Hancock County, Mississippi near the Louisiana State Line. Beach Boulevard is the main thoroughfare along the waterfront of both the cities of Bay St. Louis and Waveland. Historical as well as current wave attack against the shoreline of Hancock County has caused severe beach erosion and undermining or failure of the more than 70-year old seawall in various locations. The existing seawall has deteriorated to the point whereby the footings, especially along the toe, have rotted out in many reaches. Fill material from beneath Beach Boulevard flows into either St. Louis Bay or Mississippi Sound. Accordingly, sections of the highway have collapsed from time to time, disrupting and damaging utilities, causing hazards and delays for residents and vehicular traffic, and increasing the risk of flooding for residence and businesses along the study area. The study will be conducted for the purpose of determining if improvements for flood damage reduction, shoreline erosion, and environmental restoration, conservation and protection are economically feasible and environmentally acceptable. Hancock County is the sponsor and understands the cost-share requirements of the feasibility phase. The Feasibility Cost Sharing Agreement was signed in April 2003.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2006 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$1,410,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,510,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	705,000
Feasibility Phase (Non-Federal)	705,000

The reconnaissance phase was completed in April 2003. The feasibility study completion date is September 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

Division: South Atlantic Division

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional To Complete After FY 2006 \$
South Carolina					
Edisto Island Charleston District	850,000	59,000	59,000	100,000	632,000

Edisto Island is a barrier island approximately 4.5 miles in length and is located approximately 30 miles southwest of Charleston, South Carolina. The northeastern portion of Edisto Island is a state park, which includes camping sites and cabins, while the remainder of the island is primarily single-family residential. The Town of Edisto Beach has developed as a permanent and seasonal residential community with limited commercial development. The reconnaissance study report completed in August 2004 recommended that a Federal interest exists to proceed to a cost-shared feasibility study. Opportunities exist at Edisto Island to analyze and develop a recommendation that will provide for reduction of hurricane and storm damages to the beachfront structures located within the Town of Edisto Beach. This would be realized through placement of material along the beachfront that would sustain a wider beach profile through this reach of the study area. Additionally, environmental restoration and protection opportunities exist through the entire study area, primarily for protection of the habitat that exists at Edisto Beach State Park and to provide more stable turtle nesting habitat along the entire Edisto Island shoreline. The Town of Edisto Beach is the potential cost-sharing partner and understands the cost-sharing requirements of the feasibility phase, as indicated by their Letter of Intent dated 25 June 2004. The Feasibility Cost Sharing Agreement is scheduled to be executed in June 2005.

Fiscal Year 2005 funds are being used to complete the reconnaissance phase at full Federal expense and initiate the feasibility phase of the study. The funds requested for Fiscal Year 2006 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$1,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The reconnaissance phase is scheduled for completion in June 2005. The feasibility study completion date is to be determined.

7 February 2005

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
d. Special Studies					
Alabama					
Village Creek, Jefferson County (Birmingham Watershed) Mobile District	1,463,000	1,035,000	175,000	253,000	0

The study area encompasses the watersheds in metropolitan Birmingham, Alabama that are located in the Black Warrior River Basin, including Village Creek and Valley Creek, in Jefferson County in northern Alabama. Due to recent flooding, there is an urgent need to examine the area for flood damage prevention. Floods in October 1995, January 1996, March 1996, May 2002 and January 2004 damaged over 2,000 residential and commercial properties, and the Birmingham International Airport, in the Village Creek watershed with damages estimated to be about \$6,000,000. The feasibility study will include engineering, economic, and environmental investigations to identify potential alternatives that would alleviate flood damages. The City of Birmingham is the local sponsor and understands the requirements for study cost sharing. Feasibility Cost Sharing Agreement was signed in March 1999, and revised in May 2001.

Fiscal Year 2005 funds will be used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2006 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$2,686,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,806,000
Reconnaissance Phase (Federal)	120,000
Feasibility Phase (Federal)	1,343,000
Feasibility Phase (Non-Federal)	1,343,000

The reconnaissance phase was completed in March 1999. The feasibility study completion date is September 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
e. Ecosystem Restoration Studies					
Georgia					
Allatoona Lake Watershed	3,015,000	952,000	357,000	750,000	956,000
Mobile District					

Allatoona Lake is a Federal project located on the Etowah River, a tributary to the Coosa River, 48 miles above Rome, Georgia. The project includes a dam, hydroelectric powerhouse, gated spillway, a flood control reservoir and 31 recreational areas over 37,000 acres. The "Clean Lake Study" commissioned by local water authorities and undertaken by the A. L. Burris Institute of Public Service at Kennesaw State University sought to identify environmental problems within Lake Allatoona. The study notes that pollution has affected a tributary of the lake known as the Little River area. The study also concluded that erosion and sedimentation could contribute unwanted loads into the Etowah River and downstream into Lake Allatoona. The study will be conducted to evaluate environmental problems and recommend environmental restoration measures, including structural and non-structural approaches for the Little River Watershed, which drains into Lake Allatoona. The study will also identify and recommend measures to alleviate shoreline erosion and sedimentation problems, including structural and non-structural solutions, along Lake Allatoona, Little River, and the Etowah River. The original Feasibility Cost Sharing Agreement was signed with one sponsor, in May 2002, but the sponsor was unable to fulfill their financial obligations. The Upper Etowah River Basin Group is the new sponsor and they understand the cost-share requirements of the feasibility phase. The revised Feasibility Cost Sharing Agreement was signed in October 2003. The Upper Etowah River Basin Group includes seven counties and seven water/sewer authorities.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2006 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,715,000
Reconnaissance Phase (Federal)	315,000
Feasibility Phase (Federal)	2,700,000
Feasibility Phase (Non-Federal)	2,700,000

The original reconnaissance phase was completed in May 2002. The feasibility study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Indian, Sugar, Intrenchment, and Snapfinger Creeks, GA Mobile District	2,395,000	287,000	79,000	680,000	1,349,000

Indian, Sugar, Intrenchment, and Federal Prison Creeks are located within the metropolitan Atlanta watershed in portions of DeKalb County, Fulton County and the City of Atlanta. Fulton County and DeKalb County, Georgia and the City of Atlanta have passed floodplain regulations, resolutions, or ordinances to restrict development in flood-prone areas; however, the rapid urbanization of the metropolitan Atlanta area prior to their passage resulted in the development of many areas subject to periodic flooding. Both scarcity of land and attractiveness of streamside areas contributed to encroachment on the floodplain. Local drainage patterns have also been greatly altered by urbanization. At many locations, extensive storm drain systems have been used to substantially alter natural drainage patterns in order to remove water quickly. Rapid urbanization in the metropolitan Atlanta area over the last few decades has resulted in increases in the magnitude and frequency of severe floods; increased streambank erosion; depreciated water quality; a reduction in diversity and abundance of aquatic insects and fish; and destruction of wetlands, riparian buffers, and springs. The study will be conducted to develop portions of a comprehensive watershed plan for metropolitan Atlanta, including Indian, Sugar, Intrenchment, Federal Prison, and Snapfinger Creeks. Development of portions of the master plan will be based on a thorough assessment of the changes in stream hydrology, morphology, water quality and habitat and ecology. DeKalb County is the sponsor and they understand the cost-share requirements of the feasibility phase. The Feasibility Cost Sharing Agreement was signed in June 2003.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2006 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$4,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,645,000
Reconnaissance Phase (Federal)	145,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	2,250,000

The reconnaissance phase was completed in June 2003. The feasibility study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Long Island, Marsh, Johns Creeks Mobile District	1,423,000	213,000	97,000	676,000	437,000

Long Island, Marsh and Johns Creeks are located within the metropolitan Atlanta watershed principally in Fulton County. Fulton County, Georgia has passed floodplain regulations, resolutions, or ordinances to restrict development in flood-prone areas; however, rapid urbanization prior to their passage resulted in the development of many areas subject to periodic flooding. Both scarcity of land and attractiveness of streamside areas contributed to encroachment on the floodplain. Local drainage patterns have also been greatly altered by the urbanization of the metropolitan area. At many locations, extensive storm drain systems have been used to substantially alter natural drainage patterns in order to remove water quickly. Rapid urbanization in the metropolitan Atlanta area over the last few decades has resulted in increases in the magnitude and frequency of severe floods; increased streambank erosion; depreciated water quality; a reduction in diversity and abundance of aquatic insects and fish; and destruction of wetlands, riparian buffers, and springs. The study will be conducted to develop portions of a comprehensive watershed plan for metropolitan Atlanta, including Long Island, Marsh and Johns Creeks. Development of portions of the master plan will be based on a thorough assessment of the changes in stream hydrology, morphology, water quality and habitat and ecology. Fulton County is the sponsor and understands the cost-share requirements of the feasibility phase. The Feasibility Cost Sharing Agreement was signed in May 2003 for Johns Creek. The Feasibility Cost Sharing Agreement was to be amended to include Long Island and Marsh Creeks in March 2004.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2006 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$2,600,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing follows:

Total Estimated Study Cost	\$2,723,000
Reconnaissance Phase (Federal)	123,000
Feasibility Phase (Federal)	1,300,000
Feasibility Phase (Non-Federal)	1,300,000

The reconnaissance phase was completed in May 2003. The feasibility study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Savannah Harbor Ecosystem Savannah District	2,040,000	853,000	198,000	400,000	589,000

The Savannah River Basin encompasses an area of 11,000 square miles in Georgia and South Carolina. Major cities in the basin are Savannah and Augusta, Georgia, and Aiken, South Carolina. Recent studies by the Corps of Engineers, the states of Georgia and South Carolina, and Federal and State agencies have highlighted that there are current water resource problems and needs being encountered in the Savannah River Basin that need to be investigated. A critical need to address dissolved oxygen levels in Savannah Harbor was identified by several major stakeholders. Although the focus of this problem is Savannah Harbor, modeling and technical work will extend to Augusta, Georgia to evaluate upstream contributions to point and non-point source loads. Evaluation of dissolved oxygen in Savannah Harbor is a complex issue due to the dynamic nature of the tidal estuary, the complicated hydraulic processes in the harbor, and uncertainties associated with related biological components. The historical seasonal lowering of dissolved oxygen in Savannah Harbor is well documented and illustrates an annual impairment of the estuary's ecosystem. Two endangered species, the Shortnose Sturgeon and the Manatee, are common in the estuary. The Sturgeon can be affected by low levels of dissolved oxygen. Channel deepenings have impacted the geography and thus the hydrology of the river channel. Increased channel depths have reduced vertical mixing. Higher salinity levels and lower dissolved oxygen have resulted. Data from sampling during summer low flow periods indicate dissolved oxygen levels below 1.0 in the navigation channel. These levels are not supportive of a healthy, productive, aquatic ecosystem. The local sponsor, the City of Savannah, signed the Feasibility Cost Sharing agreement in August 1999.

Fiscal Year 2005 funds are being used to initiate modeling runs and continue the feasibility phase of the study. The funds requested for Fiscal Year 2006 will be used to continue the feasibility phase and initiation of the writing of the report. The estimated cost of the feasibility phase is \$3,920,000, which is cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,000,000
Reconnaissance Phase (Federal)	80,000
Feasibility Phase (Federal)	1,960,000
Feasibility Phase (Non-Federal)	1,960,000

The reconnaissance phase was completed in August 1999. The feasibility study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006  
Division: South Atlantic Division

Study	Total Estimated Federal Cost	Allocation Prior to FY 2005	Allocation FY 2005	Tentative Allocation FY 2006	Additional to complete After FY 2006
North Carolina	\$	\$	\$	\$	\$
Currituck Sound Wilmington District	1,125,000	170,000	167,000	300,000	488,000

The study area is located in Currituck and Dare Counties in the northeastern part of North Carolina. Currituck Sound is a 153 square mile brackish water estuary separated from the Atlantic Ocean by thin barrier islands known as the Outer Banks. The most significant freshwater inputs to Currituck Sound include North Landing River and Northwest River, both originating in the Great Dismal Swamp of North Carolina and Virginia. Back Bay, a 35 square mile estuary located in Virginia, also discharges water into the sound through shallow water channels along the eastern shore. Water level fluctuations in Currituck Sound are a function of prevailing winds from Albemarle Sound. Southerly winds force water into Currituck Sound, whereas northerly winds force water out. The cumulative effects of prevailing winds and possible point source inputs of brackish water from Federal canals influence sound salinity. The local interests are concerned about increased salinity levels which have frequently exceeded the threshold for many freshwater fisheries and have caused a severe decline in these fisheries. In addition, the increased salinity regime has contributed to the loss of extensive submerged aquatic vegetation (SAV). SAV provides a food source for various fish stocks, creates an ideal habitat for numerous migrating waterfowl species, and maintains the stability of the sound bottom. The study will address these water quality issues and explore environmental protection and restoration alternatives. The State of North Carolina is the potential sponsor and understands the cost share requirements on the feasibility study. The feasibility cost sharing agreement was signed on 5 February 2004.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study. Fiscal Year 2006 funds will be used to continue the feasibility phase including collecting required data and performing modeling activities to aid in determining a preferred restoration condition. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,125,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase was completed in February 2004. The feasibility study completion date is to be determined.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

Division: South Atlantic Division

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional To Complete After FY 2006 \$
South Carolina					
Reedy River Charleston District	933,000	150,000	154,000	300,000	329,000

Located in northwestern South Carolina, the Reedy River flows approximately 73 miles from the foothills of the Blue Ridge Mountains in Greenville County to its confluence with the Saluda River at Lake Greenwood in Laurence County. The watershed includes a total drainage area of 352 square miles and 325 miles of stream channel. The upper (northern) portion of the watershed includes the city of Greenville, which is considered to be one of the fastest growing regions in the United States. The increase in urban and industrial development over the past century has altered drainage conditions and has adversely impacted riparian zones along the river channel and its tributaries. This development has contributed to flash flooding, stream channelization, severe stream bank erosion and the resulting sedimentation, loss of riparian zone vegetation, and the filling and/or isolation of wetlands within the floodplain. As a result, the ecosystem has been significantly degraded. Reedy River watershed contains 4 of 5 known colonies of federally listed Bunched Arrowhead plants. Over half of the riverine-forested wetland in the Reedy River watershed has been lost in the past 50 years. Approximately 110 miles of stream miles will be restored. A large grass roots effort for protecting and restoring the Reedy River is underway. The Saluda-Reedy Watershed Consortium has expressed interest in sponsoring a feasibility study to address comprehensive measures to reduce flood damages, stabilize stream banks and restore ecosystems associated with wetlands, riparian and aquatic systems. Negotiations are currently underway to execute the Feasibility Cost Sharing Agreement in April 2005.

Fiscal Year 2005 funds are being used to complete the reconnaissance phase at full Federal expense and initiate the feasibility phase of the study. The funds requested for Fiscal Year 2006 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$1,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,683,000
Reconnaissance Phase (Federal)	183,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The reconnaissance phase is scheduled for completion in April 2005. The feasibility study completion date is to be determined.

6APPROPRIATION TITLE: General Investigations, Fiscal Year 2006  
Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
PRECONSTRUCTION ENGINEERING AND DESIGN (PED) - Navigation					
Savannah Harbor Expansion Savannah District	4,387,000	1,602,000	397,000	800,000	1,588,000

The Savannah Harbor area includes the lower 21.3 miles of the Savannah River, which is the principal boundary between the states of Georgia and South Carolina. The City of Savannah is located about 18 miles from the river mouth. Results of the South Atlantic Cargo Traffic Container Study indicate the current 1.9 million twenty-foot equivalent units (TEU) through South Atlantic Ports is projected to exceed 13 million TEU by the year 2050; this volume is greater than today's total U.S. containerized trade. With this growth, the capacity of the Port of Savannah container cargo facilities is expected to be exceeded by late 2005. The non-Federal interest, Georgia Ports Authority (GPA), conducted the Feasibility Study under the authority of Section 203 of the Water Resources Development Act of 1986 (WRDA 86) and was responsible for funding all associated Feasibility Study costs. The Feasibility Report was submitted to the Secretary of the Army in August 1998. The project, conditionally authorized in WRDA 99, is estimated to cost \$281,580 with an estimated Federal cost of \$162,347 and an estimated non-Federal cost of \$119,233 includes deepening the harbor channel from 42 feet to 48 feet (2001 price levels). The average annual benefits amount to \$35.2 million, all for commercial navigation. The benefit-cost ratio is 3.0 to 1 at 7-1/8 percent based on the latest economic analysis dated August 1998. The Georgia Ports Authority is aware of project cost sharing requirements. PED may ultimately be cost shared either under the authority of Section 204 of WRDA 86 at the rate for the project to be constructed or under the special legislation of 2002, Energy and Water Bill, but will be financed through the PED period at 82 percent non-Federal and 18 percent Federal. Upon completion of construction, credit will be given to the local sponsor for the Federal share of the PED cost.

Total Estimated Preconstruction Engineering and Design Costs	\$4,387,000	Total Estimated Preconstruction Engineering and Design Costs	\$4,387,000
Initial Federal Share	789,660	Ultimate Federal Share	3,290,250
Initial Non-Federal Share	3,597,340	Ultimate Non-Federal Share	1,096,750

In accordance with the cost sharing and financing concepts reflected in WRDA 86, non-Federal interests will be required to provide lands, easements, rights of way, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary, for the construction of the project; pay 25 percent of the cost of construction of the portion of the project which has a depth in excess of 20 feet but not in excess of 45 feet; pay 50 percent of the cost of construction of the portion

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006  
Division: South Atlantic

Study/Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
---------------	------------------------------------------	-----------------------------------------	-----------------------------	------------------------------------------	--------------------------------------------------

Savannah Harbor Expansion  
Savannah District  
(continued)

of the project which has a depth in excess of 45 feet; 50% of the incremental increase O&M attributed to the depth in excess of 45 feet, and reimburse an additional 10 percent of the cost of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, and relocations provided for commercial navigation.

Fiscal Year 2005 funds are being used to continue Federal oversight and limited participation in a Stakeholders Evaluation Group (SEG) and continue the development of the Tier II Environmental Impact Statement (EIS) (including funding the other Federal Cooperating Agencies for their work and involvement with the Tier II EIS). GPA, via the SEG, is seeking to develop a consensus on mitigation, incorporating input from local government, resource agencies, non-governmental organizations (NGO). Fiscal Year 2006 funds will be used to continue these PED activities. PED completion date is to be determined.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Tampa Harbor - Big Bend Channel (Continuing)

LOCATION: The project area is located in central Florida on the west coast.

DESCRIPTION: The project provides for widening of the existing entrance channel from 200 to 250 feet, enlarging the turning basin, and deepening the 2.2-mile entrance channel from 34 to 41 feet.

AUTHORIZATION: Water Resources Development Act of 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 4.67 to 1 at 5-5/8 percent. 3.88 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 4/57 to 1 at 5-5/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are included in the Tampa Harbor - Big Bend Channel Feasibility Report and Environmental Assessment completed in September 1996 (Revised September 1997) at April 1998 price level. A Limited Reevaluation Report is underway to update the project benefits and costs to FY 05 levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2005)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (COE)	12,302,000		Channels & Canals		
Estimated Appropriation Requirement (USCG)	498,000		Main Channels & Turning Basin	0	Apr 06
Estimated Total Appropriation Requirement	12,800,000		Disposal Area Raising	0	TBD
Future Non-Federal Reimbursement	1,655,000				
Estimated Federal Cost (Ultimate)	11,145,000		Entire Project	0	TBD
Estimated Non-Federal Cost	8,355,000				
Cash Contributions	4,223,000				
Other	2,447,000				
Reimbursement Navigation	1,655,000				
Total Estimated Project Cost	19,500,000				
Allocation to 30 September 2004	639,000				
Conference Allowance for FY 2005	7,500,000				
Allocations for FY 2005	6,663,000	<u>1/</u>			
Allocations through FY 2005	7,302,000	59%			
Allocations Requested for FY 2006	5,000,000	100%			
Scheduled Balance to Complete After FY 2006	0				
Unscheduled Balance to Complete After FY 2006	0				

1/ Reflects \$783,000 reduction assigned as savings and slippage and \$54,000 rescission.

JUSTIFICATION: Tampa Harbor is among the nation's leading exporters of phosphate rock and chemicals. The main Federal ship channel in Tampa Harbor is 43 feet in depth. The Big Bend channel is maintained by local interests to a depth of 34 feet, and connects the Tampa Harbor main ship channel to terminals at Big Bend, a distance of 2.2 miles. The channel supports bulk movements of coal, phosphate rock, and phosphate chemicals at the Big Bend terminals.

Annual Benefits	Amount
Deep Draft Navigation	3,604,000
Total	3,604,000

FISCAL YEAR 2006: The requested amount will be applied as follows:

Complete channels & turning basin	\$ 3,802,000
Complete disposal area	814,000
Environmental Monitoring	64,000
Planning, Engineering and Design	35,000
Construction management	285,000
Total	\$5,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 25 percent of the costs allocated to deep draft navigation during construction	4,223,000	0
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction as reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged or excavated material disposal areas provided for commercial	1,665,000	0
Pay 100% of the costs associated with dredging berthing areas and bulkhead modifications.	2,447,000	0
Total Non-Federal Cost	8,335,000	0

Division: South Atlantic

District: Jacksonville

Tampa Harbor, Big Bend, FL

7 February 2005

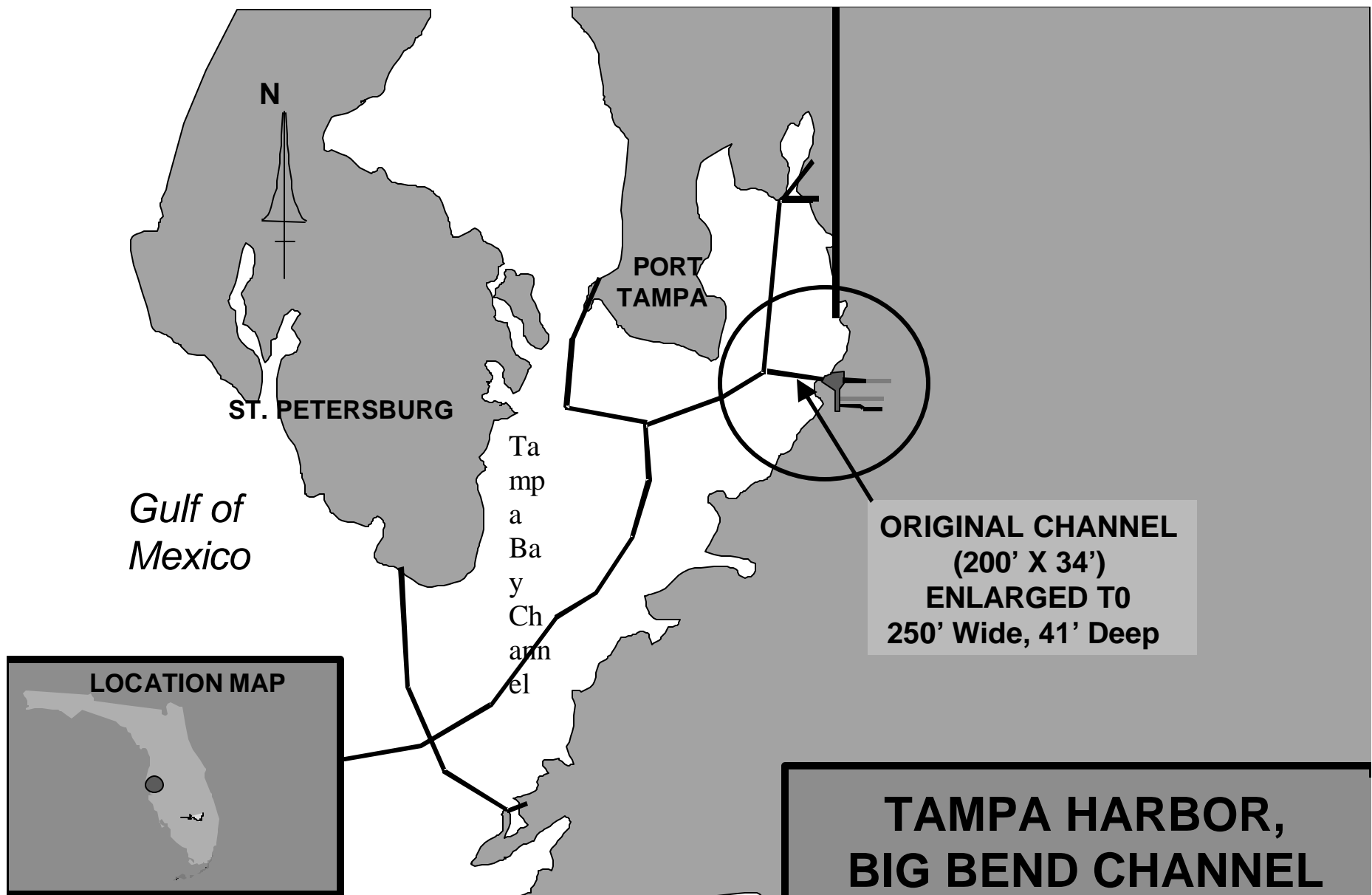
19

STATUS OF LOCAL COOPERATION: The Tampa Port Authority strongly supports this project. The Project Cooperation Agreement is scheduled for execution in July 2005.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate of \$12,302,000 is an increase of \$2,502,000 over the last estimate of \$9,800,000 presented to Congress. This change includes current pricing and more detailed information than was available for last year's preliminary estimate.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment has been completed and the FONSI was signed September 1996. The draft was prepared August 1994 and the DE Public Notice was issued September 1996.

OTHER INFORMATION: Preconstruction, Engineering, and Design was initiated in September 1997 and is scheduled for completion in July 05.





APPROPRIATION TITLE: Construction, General - Channel and Harbors (Navigation).

PROJECT: Wilmington Harbor, North Carolina (Continuing).

LOCATION: The project is located at Wilmington on the southeastern coast of North Carolina in New Hanover and Brunswick Counties.

DESCRIPTION: The project consists of two separable elements, the portion for deepening of the existing project and the portion for raising the dikes on Eagle Island dredged material disposal facility (DMDF) for maintenance of the existing project until the deepening is completed. The plan of improvement consists of deepening the ocean bar and entrance channels from the authorized depth of 40 feet to 44 feet; deepening the authorized 38-foot project to 42 feet up to and including the anchorage basin immediately upriver from the State Ports Authority dock, and extending the anchorage basin northward by 300 feet; widening the existing 400-foot wide channel to 600 feet over a total length of 6.2 miles including Lower and Upper Midnight and Lower Lilliput reaches; widen five turns and bends by 100 to 200 feet providing a total average channel width of 500 to 675 feet; widening the Fourth East Jetty Channel to 500 feet over a total length of 1.5 miles; deepening the 32-foot channel between Castle Street and the Hilton Railroad Bridge, the 32-foot turning basin just above the mouth of the Northeast Cape Fear River on the west side, and the 25-foot channel from the Hilton Railroad Bridge to 750 feet upstream all to a depth of 38 feet; deepening the 25-foot channel from 750 feet upstream of the Hilton Railroad Bridge to the turning basin near the upstream limits of the project to 34 feet, along with widening of the channel from 200 to 250 feet; and widening the turning basin from 700 to 800 feet; mitigation to include acquiring, by fee title, 30 acres of upland and construction of an embayment, acquisition of about 700 acres of existing marsh and upland areas for preservation of habitat to offset losses of wetlands and primary nursery areas and construct a fish passage structure at Lock and Dam Number 1. A separate Section 933 project was added in FY 2001 to place sand on Brunswick County Beaches. The plan of improvement for the dredged material disposal facility consists of incrementally raising the dikes of three cells on Eagle Island confined disposal facility from their current elevations to 25, 29, 32, 35, 38 and 40 feet.

AUTHORIZATION: Water Resources Development Acts of 1986 and 1996, Rivers and Harbors Acts of 1945 and 1962 and the River and Harbor Act of 1960, as amended (Section 107).

REMAINING BENEFIT-REMAINING COST RATIO: 2.3 to 1 at 7-5/8 percent (deepening portion), 3.9 to 1 at 7 percent; N/A (DMDF Portion).

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7-5/8 percent (deepening portion); N/A (DMDF Portion).

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 7-5/8 percent (deepening portion); N/A (DMDF Portion).

BASIS OF BENEFIT-COST RATIO: Benefits for the deepening portion are from the latest available evaluation contained in the feasibility report dated June 1996 at October 1995 price levels for the previous Cape Fear-Northeast Cape Fear River project, in the General Design Memorandum Supplement dated February 1994 at October 1993 price levels for the previous Wilmington Harbor-Northeast Cape Fear River project and in the feasibility report dated March 1994 at October 1992 price levels for the previous Wilmington Harbor Channel Widening project. Project feasibility for the DMDF portion is based on the original project authorization and the method of disposal of the dredged material is based on the least cost alternative as shown in the decision report approved 1 September 1998.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	PHYSICAL STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (COE)	\$312,281,000		Deepening Portion	55	TBD
Estimated Appropriation Requirement (OFA)	1,719,000		Dredged Material Disposal Facility (DMDF) Portion	11	TBD
Estimated Total Appropriation Requirement	314,000,000		Entire Project	66	TBD
Future Non-Federal Reimbursement	37,700,000				
Estimated Federal Cost (Ultimate)	276,300,000				
Estimated Non-Federal Cost	190,700,000				
Cash Contributions	105,773,000				
Other Costs	47,227,000				
Reimbursements	37,700,000				
Navigation	37,700,000				
Total Estimated Project Cost	\$467,000,000				
Allocations to 30 September 2004	199,369,000				
Conference Allowance for FY 2005	22,000,000				
Allocation for FY 2005	19,545,000	1/			
Allocations through FY 2005	218,914,000	70%			
Allocation Requested for FY 2006	19,900,000	76%			
Programmed Balance to Complete After FY 2006	73,467,000				
Unprogrammed Balance to Complete After FY 2006	0				

1/ Reflects \$2,297,000 reduction assigned as savings and slippage, \$158,000 as rescission.

# PHYSICAL DATA

Channels and Basins	Length	Width	Depth
Ocean Bar and Entrance Channel	8.5 miles	500 feet	44 feet
River Channel to mile 27.5	24.8 miles	400 feet	42 feet
Passing Lane	6.2 miles	200 feet	42 feet
Turns and Bends – widen five turns and bends by 100 to 200 feet providing a total average navigation channel width of 500 to 675 feet.			
Anchorage Basin	1600 feet	1,200 feet	42 feet
Fourth East Jetty	1.5 miles	500 feet	42 feet
Castle Street to NC 133 Bridge	1.7 miles	400 feet	38 feet
NC 133 Bridge to Hilton RR Bridge	0.5 miles	300 feet	38 feet
Hilton RR Bridge Upstream	750 feet	200 feet	38 feet
Turning Basin #1	750 feet	750 feet	38 feet
Channel from 750 feet upstream of Hilton RR Bridge to mile 30.5	1.3 miles	250 feet	34 feet
Turning Basin #2	550 feet	800 feet	34 feet

Mitigation - Acquire 30 acres of upland and construction of an embayment, acquisition of 700 acres to offset losses of wetlands and primary nursery area and install a fish ladder at Lock and Dam No. 1 on the Cape Fear River.

Dike raising of cells 1,2, and 3 on Eagle Island to elevations 25, 29, 32, 35, 38 and 40 feet.

JUSTIFICATION: The existing Wilmington Harbor project averaged 7,585,000 tons of waterborne commerce for the period 1999-2003. The recommended project would result in substantial savings ranging from \$0.57 to \$13.00 per ton in transportation and handling costs on certain commodities. The largest savings would be \$13.00 per ton on liquefied gas followed by chrome ore at \$6.88. The major commodities imported through the port are salt, chrome ore, fertilizer materials, basic chemicals, asphalt, alcohols and cement with major exports being tobacco, wood pulp and DMT fibers. It is estimated that each passing situation necessitates an average delay of approximately 25 minutes for each vessel in order to pass in the safest reaches of the river resulting in increased costs of vessel operation. Construction of the 6.2 mile passing lane will eliminate 85 percent of such delays and provide increased speeds in transit. Widening the five turns will result in an average savings of 15 minutes in vessel operating time for each transit of the river. The current 38-foot project could handle vessels in the 25,000 to 40,000 ton class while the 42-foot project could handle vessels in the 35,000 to 60,000 ton class. The current 32-foot channel can handle vessels in the 25,000 ton class while the recommended 38-foot channel will handle vessels in the 40,000 ton class. Recently completed investments in container facilities, regional highway improvements, airport facilities, and refrigerated warehouse storage will result in greater opportunities for growth. The Wilmington Harbor Ocean Dredged Material Disposal Site (ODMDS) is available for the lower reaches, an existing disposal site, Eagle Island is available for the middle reach and the upper reach of the project. Eagle Island dikes are being raised to increase capacity.

Division: South Atlantic

District: Wilmington

Wilmington Harbor, NC

7 February 2005

24

JUSTIFICATION (continued):

Since these dredging costs would be incurred every year, they represent the equivalent average annual cost of this operation and can therefore be compared directly to the equivalent annual cost associated with the Eagle Island Dike plan. This comparison resulted in the dike raising being the least costly alternative. The recommended improvements are essential to the economic welfare of New Hanover County and the surrounding area. Average annual benefits are as follows:

Annual Benefits	Amount
Commercial Navigation	\$39,292,000
Environmental Enhancement	(not quantified)
Total	\$39,292,000

FISCAL YEAR 2006: The requested amount of \$19,900,000 will be applied as follows:

Continue Channel Dredging Contracts for deepening portion	\$15,389,000
Continue Dike Raising Contracts for DMDF portion	1,911,000
Planning, Engineering, and Design for deepening portion	2,011,000
Planning, Engineering, and Design for DMDF portion	114,000
Construction Management for deepening portion	400,000
Construction Management for DMDF portion	75,000
Total	\$19,900,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of local Cooperation		
Separable Element (Deepening Portion):		
Provide lands, easements, rights of way, and dredged material disposal area lands.	\$ 2,073,000	\$6,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	21,674,000	
Pay 25 percent of the costs allocated to deep draft navigation during construction.	88,393,000	
Pay 35 percent of costs allocated to Section 933 portion during construction.	5,380,000	
Provide and maintain, at its own expense, the local service facilities necessary to realize the benefits of the general navigation features.	23,480,000	
Reimburse an additional 10 percent of the costs allocated to general navigation facilities within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations and dredged material disposal areas.	33,000,000	
Total Non-Federal Costs	\$174,000,000	\$6,000
Separable Element (DMDF):		
Pay 25 percent of the cost of construction of the facilities	\$ 12,000,000	
Reimburse an additional 10 percent of the costs of the facility within a period of 30 years following completion of construction	4,700,000	
Total Non-Federal Costs	\$16,700,000	\$0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs within a period of 30 years following completion of construction.

Division: South Atlantic

District: Wilmington

Wilmington Harbor, NC

7 February 2005

26

#### STATUS OF LOCAL COOPERATION:

The State of North Carolina is the project sponsor. By letters dated 16 May 1996 and 24 April 1997 the State expressed support for the project and provided assurances of their intent to act as project sponsor and to sign a Project Cooperation Agreement (PCA) at the appropriate time. The State of North Carolina intends to seek appropriations from the General Assembly to fund its share of the project cost. The future reimbursement payment will be initiated in the year following completion of construction. The combined PCA was executed on 26 March 1999 for both elements. All work on the dredged material disposal facility prior to FY 00 was accomplished with advanced contributed funds under an agreement executed in July 1997. The future reimbursement for this element will be initiated in the year following the completion of the first dike raising.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$312,281,000 is an increase of \$5,972,000 from the latest estimate (\$306,309,000) presented to Congress (FY 2005).

Item	Amount
Price Escalation on Construction Features	\$ 3,728,000
Post Contract Award and other Estimating Adjustments	2,244,000
Total	\$ 5,972,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The draft EIS for the deepening portion was filed with EPA in February 1996. The final EIS was filed with EPA in July 1996. 401 Certification was completed in October 1996. The final EIS for the DMDF portion was filed with EPA in July 1996. A Record of Decision was signed in December 1996. A Finding of No Significant Impact for design changes was signed in June 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1987. The Wilmington Harbor, NC - 96 Act, and Wilmington Harbor, NC (Dredged Material Disposal Facilities) projects were combined in October 1998 to form this project.

Wilmington Harbor, NC - 96 Act - Deepening Portion

SUMMARIZED FINANCIAL DATA FOR SEPARABLE ELEMENTS:

Estimated Appropriation Requirement (COE)			\$277,281,000
Estimated Appropriation Requirement (OFA)			1,719,000
Estimated Total Appropriation Requirement			279,000,000
Estimated Federal Cost (Ultimate)			246,000,000
Estimated Non-Federal Cost			174,000,000
Cash Contributions		93,773,000	
Other Costs		47,227,000	
Reimbursements		33,000,000	
Navigation	33,000,000		
Total Estimated Project Cost			\$420,000,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: 2.3 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: 1.3 to 1 at 7 5/8 percent.

Wilmington Harbor, NC - Dredged Material Disposal Facilities Portion

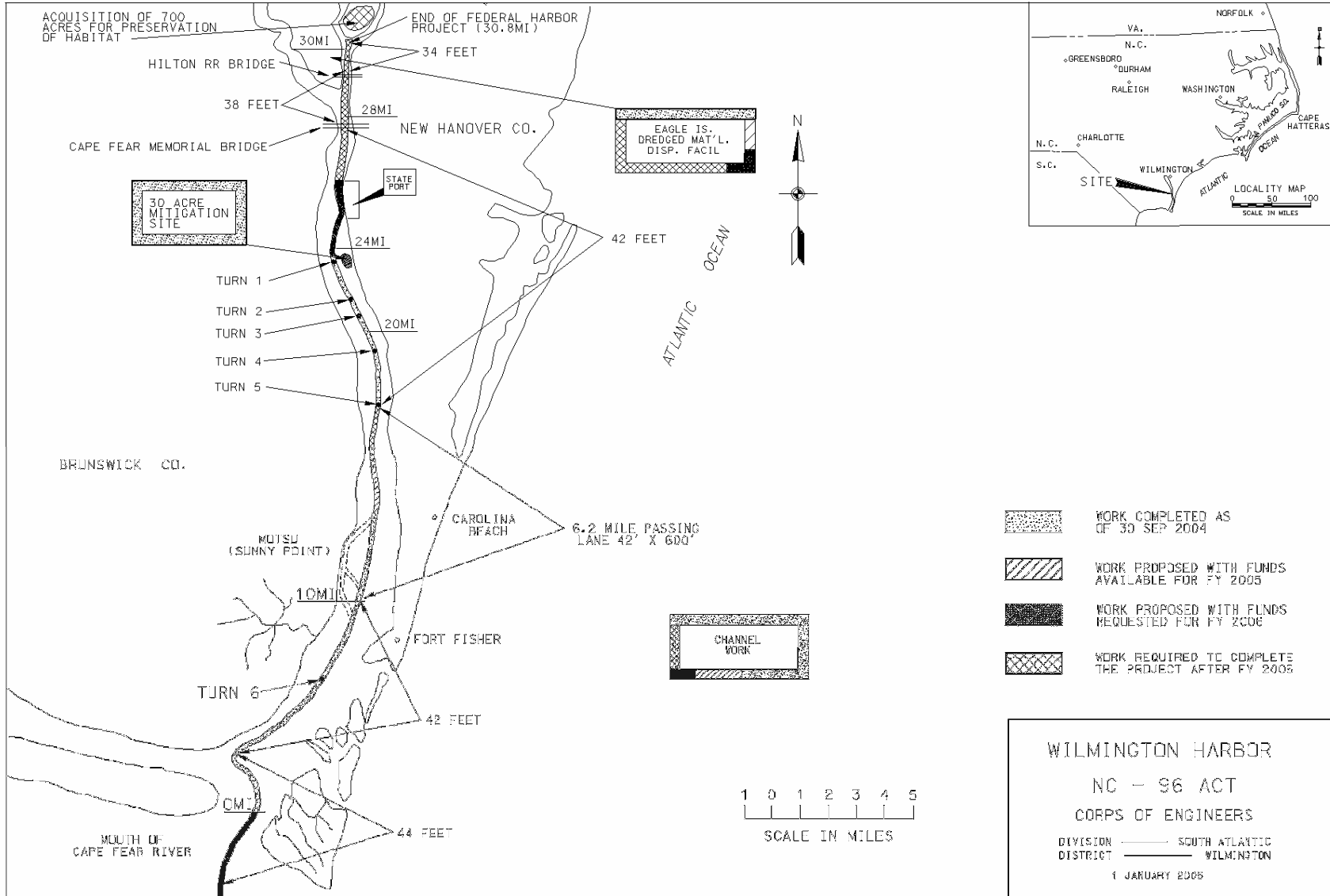
SUMMARIZED FINANCIAL DATA FOR SEPARABLE ELEMENTS:

Estimated Total Appropriation Requirement			\$35,000,000
Estimated Non-Federal Reimbursement			4,700,000
Estimated Federal Cost (Ultimate)			30,300,000
Estimated Non-Federal Cost			16,700,000
Cash Contributions		\$12,000,000	
Other Costs		0	
Reimbursements		4,700,000	
Navigation	\$4,700,000		
Total Estimated Project Cost			\$47,000,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.





APPROPRIATION TITLE: Construction, General - Navigation Mitigation and Storm Damage Reduction

PROJECT: Wrightsville Beach, North Carolina (Continuing)

LOCATION: The project is located on a small island off the southeast coast of North Carolina, approximately 10 miles east of Wilmington in New Hanover County.

DESCRIPTION: The project provides for construction of a dune with a crown width of 25 feet at an elevation of 15 feet above mean low water and a berm with a crown width of 50 feet and a top elevation of 12 feet above mean low water for a distance of 14,000 feet. Federal participation in future nourishment was initially authorized for 10 years but was extended for the life of the project by Water Resources Development Act of 1986.

AUTHORIZATION: Flood Control Act of 1962, Water Resources Development Act of 1976, and Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 2.5 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 1.5 to 1 at 8-5/8 percent.

INITIAL BENEFIT - COST RATIO: 3.5 to 1 at 3.0 percent (FY 1965).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in October 1989 at February 1989 price levels.

SUMMARIZED FINANCIAL DATA – FLOOD DAMAGE REDUCTION			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			\$23,000,000	Entire Project	23	TBD
Programmed Construction			5,398,000			
Initial Construction	\$ 713,000					
Periodic Nourishment	4,685,000		<u>1/</u>			
Unprogrammed Construction			17,602,000			
Initial Construction	0					
Periodic Nourishment	17,602,000					
Estimated Non-Federal Cost			\$13,000,000			
Programmed Construction			2,745,000			
Initial Construction	\$ 345,000					
Cash Contributions	\$ 345,000					
Other Costs	0					
Periodic Nourishment		2,400,000				
Cash Contributions	2,400,000					
Other Costs	0					
Unprogrammed Construction			10,255,000			
Initial Construction	0					
Cash Contributions	0					
Other Costs	0					
Periodic Nourishment		10,255,000				
Cash Contributions	10,255,000					
Other Costs	0					
Total Programmed			8,143,000			
Initial Construction	1,058,000					
Periodic Nourishment	7,085,000					
Total Unprogrammed			27,857,000			
Initial Construction	0					
Periodic Nourishment	27,857,000					
Total FDR Cost			36,000,000			
Initial Construction	\$ 1,058,000					
Division: South Atlantic			District: Wilmington			Wrightsville Beach, NC

7 February 2005

Periodic Nourishment	34,942,000		
Allocations to 30 September 2004	\$ 5,398,000		
Conference Allowance for FY 2005	0		
Allocation for FY 2005	0		
Allocations through FY 2005	5,398,000	23	
Allocation Requested for 2006 2/	0	23	
Programmed Balance to Complete after FY 2006 2/	0		
Unprogrammed Balance to Complete after FY 2006 2/	17,602,000		

1/ Based on 50 years of future nourishment.

2/ All remaining work on storm damage reduction (54 percent of total costs) is unprogrammed.

SUMMARIZED FINANCIAL DATA -- NAVIGATION IMPACT CORRECTION				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost				TBD	Entire Project	TBD	TBD
Programmed Construction				TBD			
Initial Construction	TBD						
Periodic Nourishment	TBD						
Unprogrammed Construction				TBD			
Initial Construction	TBD						
Periodic Nourishment	TBD						
Estimated Non-Federal Cost				TBD			
Programmed Construction				TBD			
Initial Construction	TBD						
Cash Contributions	TBD						
Other Costs	TBD						
Periodic Nourishment		TBD					
Cash Contributions	TBD						
Other Costs	TBD						
Unprogrammed Construction				TBD			
Initial Construction		TBD					
Cash Contributions	TBD						
Other Costs	TBD						

Division: South Atlantic

District: Wilmington

Wrightsville Beach, NC

7 February 2005

33

Periodic Nourishment		TBD	
Cash Contributions	TBD		
Other Costs	TBD		
Total Programmed			TBD
Initial Construction		TBD	
Periodic Nourishment		TBD	
Total Unprogrammed			TBD
Initial Construction		TBD	
Periodic Nourishment		TBD	
Total Nav. Correction Cost			TBD
Initial Construction		TBD	
Periodic Nourishment		TBD	
Allocations to 30 September 2004 <u>3/</u>			TBD
Conference Allowance for FY 2005			0
Allocation for FY 2005			0
Allocations through FY 2005 <u>3/</u>		TBD	TBD
Allocation Requested for 2006 <u>3/ 4/</u>	\$	890,000	TBD
Programmed Balance to Complete after FY 2006 <u>3/</u>		TBD	
Unprogrammed Balance to Complete after FY 2006 <u>3/</u>		TBD	

3/ Costs allocable to correction of impacts to shorelines attributable to the Masonboro Inlet (46 percent of total costs) have been funded through FY 2005 in the Operation and Maintenance, General account using funds provided for the Masonboro Inlet project. The FY 2006 budget proposes that the costs to correct impacts from Masonboro Inlet be financed through the Construction account with funds provided for the Wrightsville Beach project.

4/ Under legislation proposed in the FY 2006 budget, the funds will be derived from the Harbor Maintenance Trust Fund.

#### PHYSICAL DATA

	Dune	Integral Berm	Feeder Berm
Elevation	15 feet above MLW	12 feet above MLW	12 feet above MLW
Crown Width	25 feet	50 feet	120 feet
Length	14,000 feet	14,000 feet	3,000 feet

Division: South Atlantic

District: Wilmington

Wrightsville Beach, NC

7 February 2005

34

JUSTIFICATION: The purpose of this project is mitigation of navigation impacts and hurricane and storm damage reduction. The Masonboro Inlet Project has contributed to the shoreline erosion at Wrightsville Beach. Wrightsville Beach experienced heavy losses during the hurricanes of 1944, 1954, 1955, 1958, and 1960. It is estimated that recurrence of those hurricanes would cause damages of about \$28,469,000 based on 1982 level of development and 1 October 2000 prices. The project will reduce damages to the beach and property along the beach from hurricanes of equal or less intensity than that of Hurricane Hazel, provide increased area for recreational use, and increased earning power for shore-front and other property in the affected community. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention	\$570,100
Recreation	353,300
Total	\$923,400

FISCAL YEAR 2006: The requested amount of \$890,000 will be applied as follows:

Replace Sand Lost due to Navigation Project Since Last Nourishment Cycle	\$ 510,000
Planning, Engineering and Design	300,000
Construction Management	80,000
Total	\$ 890,000

NON-FEDERAL COST: In accordance with the Flood Control Act of 1962 and the Water Resources Development Acts of 1976 and 1986, the costs allocable to correction of impacts from the Federal navigation channel (46 percent) shall be cost shared 100 percent Federal, and the costs allocable to storm damage reduction shall be cost shared 65 percent Federal and 35 percent non-Federal.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of local Cooperation		
Provide lands, easements, rights of way, and dredged material disposal areas.		
Modify or relocate utilities, roads, and other facilities, where necessary for the construction of the project.		
Pay 35 percent of the cost allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities.	\$13,000,000	\$4,900
Total Non-Federal Costs	\$13,000,000	\$4,900

STATUS OF LOCAL COOPERATION: The Town of Wrightsville Beach has complied with all the terms of local cooperation to date including initial construction and periodic nourishment through FY 1998. On 1 November 1983, a local occupancy tax went into effect in New Hanover County. Seventy-five percent of the revenues collected from this tax must be used for beach erosion control. A local cooperation agreement (LCA) was executed by ASA(CW) on 27 June 1990.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$23,000,000 is an increase of \$6,700,000 from the latest estimate (\$16,300,000) submitted to Congress (FY 2002). Both cost estimates are limited to the Federal share of the costs allocable to storm damage reduction and do not include costs allocable to correction of impacts from the Federal navigation channel, for which costs are being determined. This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 386,000
Post Contract Award and other Estimating Adjustment	6,314,000
Total	+\$6,700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Finding of No Significant Impact was signed in August 1989.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1965. In accordance with Section 156 of the Water Resources Development Act of 1976 Federal authorization for participation in the initial project was limited to work initiated before the end of calendar year 1980. The 1986 Act authorized future nourishment for the life of the project; however, a 50-year period was used for the purpose of preparing a cost estimate. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up work for such projects, except in those cases where Federal navigation projects contribute to the erosion of the shoreline.





APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Roanoke River Upper Basin, Virginia, Headwaters Area (Resumption)

LOCATION: The project is located on the Roanoke River in the City of Roanoke, Virginia.

DESCRIPTION: The project includes about 6.2 miles of channel widening along the 10 miles of river through the City of Roanoke, Virginia. Channel widening will be accomplished with the construction of a benched channel above the elevation of the average stream flow. Other flood damage reduction features include flood proofing at two locations, training walls to prevent floodwater intrusion into low areas along the river, replacement of two low-level bridges that constrict stream flows, and a flood warning system. Recreation facilities consist of a 9.5-mile recreation trail along the project reach and access and parking areas. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986, Energy and Water Development Appropriation Act of 1990 and Energy and Water Development Appropriation Act of 2004.

REMAINING BENEFIT - REMAINING COST RATIO: 1.4 to 1 at 8-7/8 percent. 1.8 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 1.04 to 1 at 8-7/8 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8-7/8 percent (FY 1990).

BASIS OF BENEFIT - COST RATIO: Benefits are from the General Design Memorandum approved in January 1990 at 1988 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$45,800,000		Entire Project	27	TBD
Estimated Non-Federal Cost		\$19,500,000				
Cash Contributions	8,707,000					
Other Costs	10,793,000					
Total Estimated Project Cost		\$65,300,000				
Allocations to 30 September 2004		\$12,390,000				
Conference Allowance for FY 2005		5,000,000				
Allocation for FY 2005		4,442,000	1/			
Allocations through FY 2005		16,832,000	37%			
Allocation Requested for 2006		5,000,000	48%			
Programmed Balance to Complete after FY 2006		23,968,000				
Unprogrammed Balance to Complete after FY 2006		0				

1/ Reflects \$522,000 reduction assigned as savings and slippage and \$36,000 as rescission.

#### PHYSICAL DATA

##### Project Features:

Channel Excavation	27,000 linear feet
Training Wall	6,300 linear feet
Paved Recreation Trail	50,160 linear feet
Parking/Access Areas	3 each
Riprap	28,000 tons

##### Relocations:

Utility	3,880 linear feet
Roads	2,000 linear feet
Overhead Line	6,350 linear feet
Buildings	13 each
Bridges	2 each

Division: South Atlantic

District: Wilmington

Roanoke River Upper Basin, VA, Headwaters Area

7 February 2005

40

# PHYSICAL DATA - Continued

## Land Acquisition (acres):

Total Rights of Way Requirement	195
Flood Control Rights of Way	185
Disposal Areas (Temporary)	40
Recreation Rights of Way (Separable)	20
Right of Way Underwater	110

JUSTIFICATION: The project will provide improvements for flood protection and recreation. Most of the property that would be protected is industrial and commercial with a value of \$680,000,000. The average annual damages in the project area are estimated at \$5,777,000 at October 1988 price levels and 1988 level of development over the next 50 years if no flood control facilities are provided. The project would reduce these damages by \$3,126,200. The maximum flood of record, November 1985, caused damages estimated at \$112,424,000 under 1985 conditions of development and price levels. Damages at 1988 levels of development and October 1988 price levels would be \$119,997,000. Floodplain development is not promoted by the project. Return on investments by local businesses is adversely affected by the flood problem. Firms have to use resources to repair and attempt flood proofing that could be used for expansion and modernization. In this respect, return on investment is suppressed. The project will have a beneficial effect on a variety of firms and increase return on investment throughout the floodplain. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention	\$3,403,200
Recreation	1,229,700
Total	\$4,632,900

FISCAL YEAR 2006: The requested amount of \$5,000,000 will be applied as follows:

Continue Construction	\$4,600,000
Continue Monitoring of Endangered Species	50,000
Planning, Engineering and Design	300,000
Construction Management	50,000
Total	\$5,000,000

Division: South Atlantic

District: Wilmington

Roanoke River Upper Basin, VA, Headwaters Area

7 February 2005

41

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide all lands, easements, and rights of way including suitable spoil disposal areas	\$ 5,861,000	
Modify or relocate buildings, utilities, roads and other facilities except railroad bridges, where necessary for construction of the project.	4,932,000	
Pay 25 percent of the cost of the flood warning system (partially offset by a credit for lands, easements, rights of way, and relocations).	10,000	
Pay 5 percent of the total cost allocated to flood control in cash in addition to all lands, easements, rights of way and relocations, and bear all costs of operation, maintenance, and replacement of flood control facilities.	2,082,000	\$101,000
Pay one-half of the separable cost allocated to recreation (partially offset by a credit for land, easements, rights of way and relocations) and bear all costs of operation, maintenance and replacement of recreation facilities	6,248,000	9,000
Pay 25 percent of the cost of the non-structural flood proofing (partially offset by a credit for lands, easements, rights of way and relocations).	367,000	
Total Non-Federal Costs	\$19,500,000	\$110,000

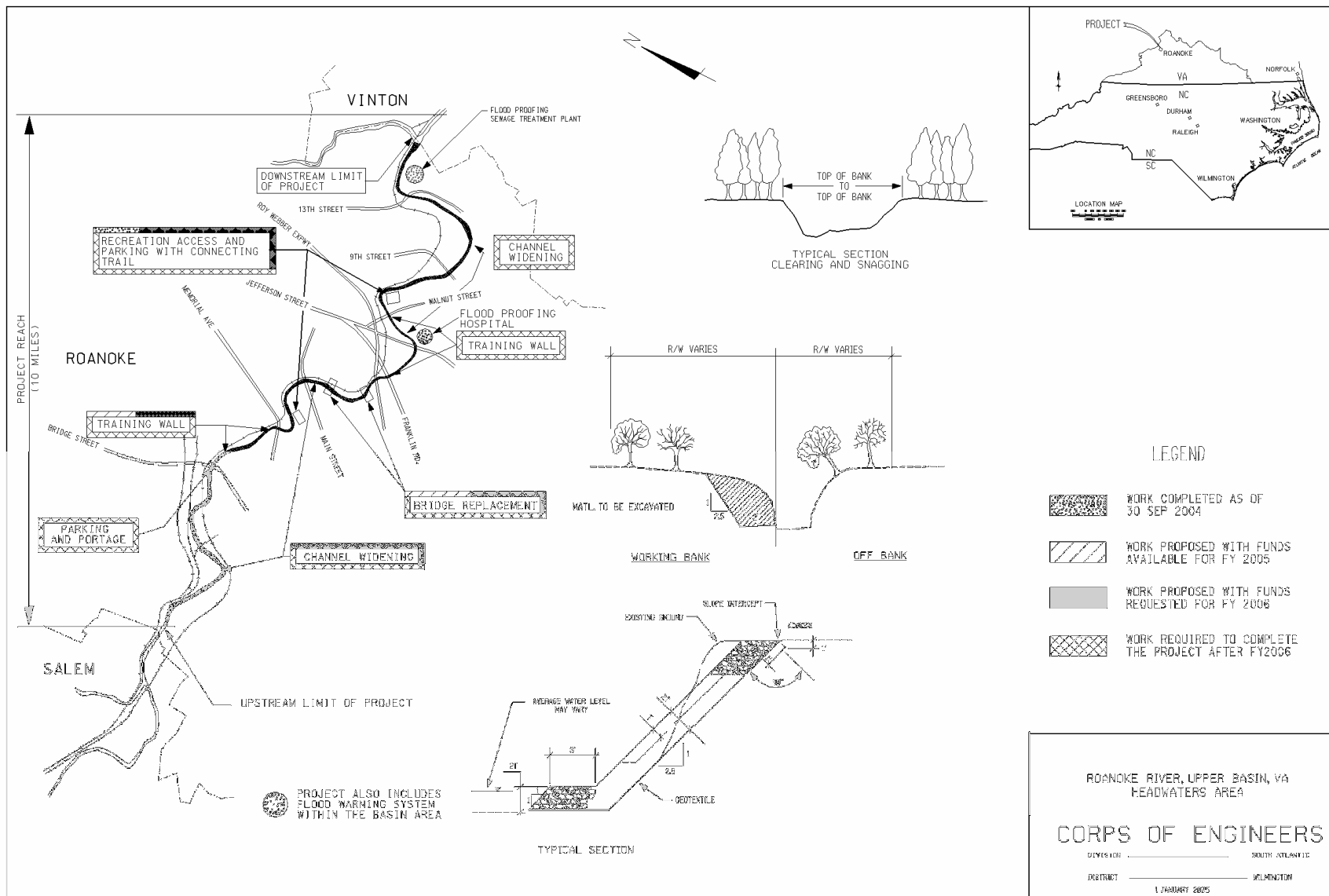
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The City of Roanoke is the project sponsor. On 11 April 1989 the voters of the City of Roanoke approved the sale of \$7.5 million worth of bonds to pay Roanoke's required cash contribution, acquire lands that are not currently owned and pay for relocation of bridges and utilities. The Local Cooperation Agreement was executed on 25 June 1990. A supplement to the Local Cooperation Agreement addressing the reimbursement for the flood proofing of the hospital was executed in January 1993. Design and construction of the project had been deferred for eight years due to concerns the sponsor had over assuming liability for potential HTRW issues that might arise during project construction. The City in conjunction with the Corps, EPA and the Virginia Department of Environmental Quality conducted an extensive investigation and review of the project right of way to alleviate these concerns. Hazardous material was found at two sites. The landowner has cleaned these sites. Soil contamination was found at 14 other sites. A project action plan for the screening and disposal of this material has been prepared and reviewed by the sponsor and the Virginia Department of Environmental Quality.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$45,800,000 is the same as the latest estimate (\$45,800,000) presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final environmental impact statement was filed with the Environmental Protection Agency in February 1985. A Finding of No Significant Impact for design changes was signed on 30 June 1989.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 1990. The project was modified by the Energy and Water Development Appropriations Act of 2004 to increase the total estimated project cost to \$61,700,000 (October 2004 price levels). The Roanoke Logperch, which is located in the project area, was listed as an endangered species effective 18 September 1989 and will be monitored during project construction. Reimbursement for the Federal share of the flood proofing of Roanoke Hospital, as authorized by Section 102cc of the Water Resources Development Act of 1990, in the amount of \$501,000, was made in February 1993.



Division: South Atlantic

District: Wilmington

Roanoke River Upper Basin, VA, Headwaters Area

7 February 2005

44

APPROPRIATION TITLE: Construction, General - Local Protection Project (Flood Control)

PROJECT: Arecibo River, Puerto Rico (Continuing)

LOCATION: The city of Arecibo is located on the northern coast of Puerto Rico, approximately 40 miles west of San Juan. The Rio Arecibo Basin covers a 272 square mile area and has experienced numerous floods over recent years. The upstream towns of Utuado, Jayuya, and Adjuntas have also been subject to the frequent flooding. Extensive floods occurred in May and October 1985 and again in September 1996 with Hurricane Hortense. When Hurricane Georges hit the island in September 1998, the municipality of Arecibo experienced the 100-year flood event, resulting in significant damages to commercial and residential properties and loss of the Victor Rojas Bridge.

DESCRIPTION: The proposed plan includes channel improvements, a floodwall, and a levee along the Arecibo River; a levee along the Tanama River; and a plug, channel improvements, and a diversion channel along the Santiago River.

AUTHORIZATION: Water Resource Development Act 1996, Sec 101(a)(26).

REMAINING BENEFIT - REMAINING COST RATIO: 5.06 to 1 at 5-5/8 percent. 4.2 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 5.06 to 1 at 5-5/8 percent

INITIAL BENEFIT - COST RATIO: 5.06 to 1 at 5-5/8 percent

BASIS OF BENEFIT - COST RATIO: Benefits are from the economic analyses performed for the July 1998 Limited Reevaluation Report updated at October 2003 price levels.



SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		16,700,000	Relocations – Roads Cemeteries/Utilities	39	TBD
Estimated Non-Federal Cost		12,200,000	Levees and Floodwalls	0	TBD
Cash Contributions	1,713,000		Recreation	0	TBD
Other Costs	10,487,000		Fish/Wildlife Facilities	0	TBD
			Channels & Canals	0	TBD
Total Estimated Project Costs		28,900,000			
Allocations to 30 September 2004		5,324,000	Entire Project	10	TBD
Conference Allowance for FY 2005		1,200,000			
Allocation for FY 2005		1,066,000	<u>1/</u>		
Allocations through FY 2005		6,390,000	38%		
Allocations Requested for FY 2006		3,800,000	61%		
Programmed Balance to Complete After FY 2006		6,510,000			
Unprogrammed Balance to Compl After FY2006		0			

1/ Reflects savings and slippage of \$125,000 and rescission of \$9,000

#### PHYSICAL DATA

Relocations - Bridges (Replacement)	5
Levee	6,325 Meters
Floodwalls	315 Meters
Channels	6,300 Meters
Jetty	30.5 Meters
Wetland Mitigation	7.2 Acres
Recreation Trails	1,465 Meters

Division: South Atlantic

District: Jacksonville

Arecibo River, PR

7 February 2005

46

JUSTIFICATION: Floods impact over 500 acres of urbanized city area, including 800 residences and over 100 businesses and public facilities. In addition to quantifiable damages, severe disruption of transportation and socio-economic activities result from these floods. Average annual benefits are as follows:

Annual Benefits	Amount
Inundation Reduction	6,609,000
Employment	80,000
Advance Bridge Replacement	161,000
Flood Insurance Cost	9,000
Recreation	236,000
Total	7,095,000

FISCAL YEAR 2006: The requested amount will be applied as follows:

Channels and Canals	\$ 2,926,000
Levees, Floodwalls & Structures	200,000
Fish and Wildlife	134,000
Floodway Control & Diversion Structures	155,000
Cultural Resources	218,000
Planning, Engineering & Design	62,000
Construction Management	105,000
Total	\$ 3,800,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below for programmed work.

Requirements of Local Cooperation	Payments During Construction, and Reimbursements	Annual Operation Maintenance, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas	5,293,000	
Modify or relocate buildings, utilities, roads, bridges, (except railroad bridges), and other facilities, where necessary in the construction of the project	5,194,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.	309,000	
Pay 8.17 percent of the first costs allocated to flood control, and bear all cost of operation, maintenance, and replacement of flood control structures.	1,404,000	\$ 76,000
Total Non-Federal Costs	12,200,000	\$ 76,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

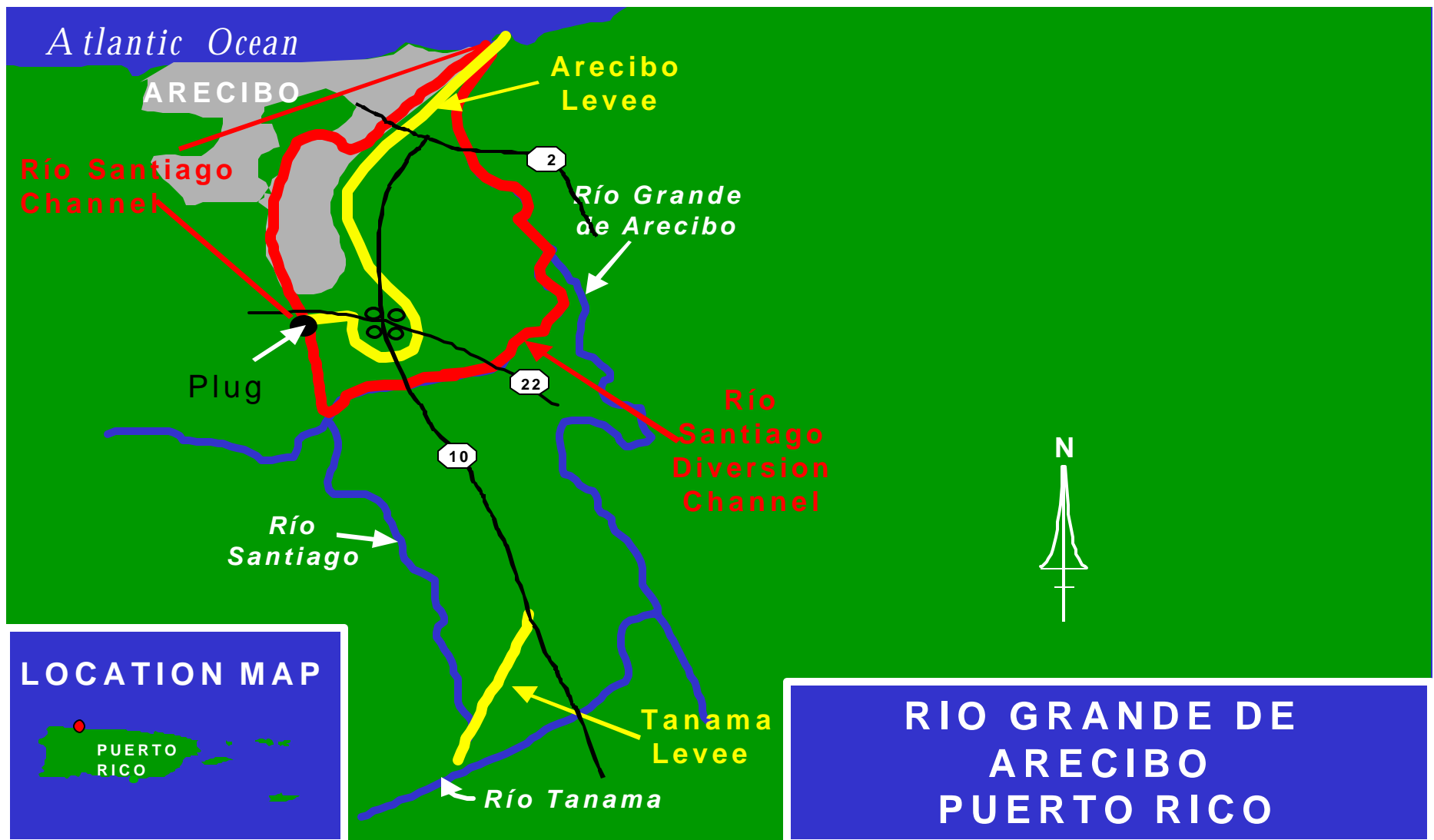
STATUS OF LOCAL COOPERATION: The Puerto Rico Department of Natural and Environmental Resources (DNER), is the local sponsor. The Project Cooperation Agreement was executed in September 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$16,700,000 is an increase of \$900,000 over the latest estimate (\$15,800,000) presented to Congress (FY 2005). This change includes the following items:

Item	Amount
Price escalation construction feature	\$ 327,000
Schedule and estimate changes	573,000
Total	\$900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the project was filed on 10 December 1993.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design (PED) were appropriated in Fiscal Year 1994 and PED was complete in September 1999. Funds to initiate a construction new start were appropriated in Fiscal Year 2000.



APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Portugues and Bucana Rivers, Puerto Rico (Continuing)

LOCATION: The improvements are in and near Ponce on the Portugues and Bucana Rivers on the south coast of Puerto Rico.

DESCRIPTION: The project provides for two multiple-purpose reservoirs for flood control, water supply, general recreation, and fish and wildlife enhancement; enlargement of 5.7 miles of Bucana River and 2 miles of Portugues River; a 1.3 mile diversion channel connecting the Portugues River to lower Bucana River; and debris basins at the Bucana and Portugues Rivers. All work is programmed except the water supply increment of Portugues Dam.

AUTHORIZATION: Flood Control Act of 1970 and Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 6.24 to 1 at 5-7/8 percent. 5.18 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 6.24 to 1 at 5-7/8 percent.

INITIAL BENEFIT - COST RATIO: 6.24 to 1 at 5-5/8 percent (FY 1975).

BASIS OF BENEFIT - COST RATIO: Benefits are from the July 1973 Design Memorandum Phase 1, Plan Formulation and Site Selection Report at July 1973 prices levels except for Portugues Dam where benefits are from the March 1990 Economic Reanalysis Report at January 1990 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		442,700,000		Channels and Canals		
Programmed Construction	442,700,000			Lower Channels	100	Aug 1978
Unprogrammed Construction	0			Upper Bucana Channel	100	Jun 1983
				Upper Portugues Channel	95	TBD
Future Non-Federal Reimbursement		213,974,000		Bucana River Debris Basin	100	Jun 1987
Programmed Construction	213,974,000			Portugues Debris Basin	100	Mar 1987
Unprogrammed Construction	0			Dams		
				Cerrillos	100	Sep 1994
Estimated Federal Cost (Ultimate)		228,726,000		Portugues (Flood Control)	30	TBD
Programmed Construction	228,726,000			Portugues (Water Supply)	0	Indefinite
Unprogrammed Construction	0			Recreation		
				Channels	60	TBD
Estimated Non-Federal Cost		365,874,000		Cerrillos	45	TBD
Programmed Construction	341,964,000			Portugues	0	TBD
Cash Contributions	31,666,000					
Other Costs	96,472,000			Entire Project	85	TBD
Reimbursement						
Water Supply	213,974,000					
Unprogrammed Construction		23,762,000				
Cash Contributions	23,762,000					
Other Costs	0					
Reimbursement	0					
Total Estimated Programmed Construction Cost		570,838,000				
Total Estimated Unprogrammed Construction Cost		23,762,000				
Total Estimated Project Cost		594,600,000				

Division: South Atlantic

District: Jacksonville

Portugues and Bucana Rivers, PR

7 February 2005

51

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM PCT OF EST FED COST
Allocations to 30 September 2004	403,322,000	
Conference Allowance for FY 2005	13,000,000	
Allocation for FY 2005	11,549,000	<u>1/</u>
Allocation through FY 2005	414,871,000	94%
Allocation Requested for FY 2006	14,000,000	97%
Programmed Balance to Complete After FY 2006	13,829,000	
Unprogrammed Balance to Complete After FY 2006	0	

1/ Reflects \$1,358,000 assigned as savings & slippage and \$93,000 as rescission.

PHYSICAL DATA

Dam	Portugues	Cerrillos
Type	Roller Compacted Concrete	Earth and rock-fill
Height	220 feet	323 feet
Crest Length	1,317 feet	1,555 feet
Spillway Type	Ungated concrete 150 feet wide	Ungated rock cut 400 feet wide
Reservoir Capacity (Acre-Feet)		
Flood Control	9,484	17,065
		25,200
Sediment	2,841	5,635
Total	25,183	47,900
Portugues River Channel Enlargement		2.1 miles
Bucana River Channel Enlargement		5.7 miles
Diversion Channel Connecting Portugues River to the Lower Bucana River		1.3 miles

JUSTIFICATION: The mountainous terrain above Ponce permits rapid runoff into the rivers which overflow in the lower elevation flood plains in Ponce causing loss of life and extensive property damage. The 1954 flood caused damages of \$1,297,000 (\$6,991,000 at 1989 price levels). Minor flooding occurs almost yearly and major floods occur every 5 years on the average. Other major damaging floods occurred in 1961 (\$4,931,000 at 1989 price levels), 1970 (\$2,176,000 at 1989 price levels), 1975 (\$35,253,000 at 1989 price levels), and 1985 (\$33,517,000 at 1989 price levels). The average degree of protection provided by the completed project will be the standard project flood frequency. Upon completion, 6,415 acres will be protected, including 4,310 agricultural acres, 1,855 urban acres, and 250 acres, which are undeveloped. Present value of property subject to flood damages is \$624,069,000. Average annual flood damages prevented are all attributable to existing urban development. Water supply is also a need that will be met by the Portugues and Bucana Rivers project. The water storage capacity in Lake Cerrillos is 25,200 acre-feet while ongoing studies have established a preliminary capacity for Lake Portugues of 14,000 acre-feet. Primary uses of the water supply will be municipal and industrial. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	43,387,000
Water Supply	13,968,000
Recreation	2,418,000
Area Redevelopment	1,116,000
Total	60,939,000

FISCAL YEAR 2006: The requested amount will be applied as follows:

Shoal Removal Phase II Contract	\$ 4,000,000
Cerrillos Recreation Area Contract	4,600,000
Initiate Portugues Dam Construction	3,500,000
Engineering & Design	1,000,000
Construction Management	900,000
Total	\$ 14,000,000



NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1970 and the Water Resources Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights-of-way.	75,277,000	
Modify or relocate buildings, utilities, roads, bridges, and other facilities, where necessary in the construction of the project.	20,188,000	
Pay additional cash required to bring the total Non-Federal share of the flood control costs to 25 percent and bear all costs of operation, maintenance, and replacement of flood control facilities.	19,463,000	249,900
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.	12,663,000	258,300
Pay all costs allocated to municipal and industrial water supply and bear all costs of operation, maintenance, and replacement of municipal and industrial water supply facilities.	24,309,000	85,700
Reimbursement for water supply on Cerrillos Dam	213,974,000	
Total Non-Federal Costs	365,874,000	593,900

STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. The following contract agreements are required pursuant to Section 221 of the River and Harbor and Flood Control Act of 1970 and the Water Resources Development Act of 1986:

Contract	Actual or Anticipated Execution Date
Section 221 – Cerrillos Reservoir	15 Mar 1982
Channels	22 Jul 1974
Water Supply – Cerrillos Reservoir	15 Mar 1982
Recreation – Cerrillos Reservoir	15 Mar 1982
Channels	24 Jun 1987
Project Cooperation Agreement – Portugues Reservoir	9 Aug 1993

STATUS OF LOCAL COOPERATION (Continue):

Portugues Dam is a roller compacted concrete dam. The dam is designed as a multi-purpose dam to be constructed in two phases. The Commonwealth of Puerto Rico has requested that the dam be constructed as soon as possible for flood control and recreation, but to defer the water supply feature to a later date. By letter dated May 2003, the Commonwealth restated their commitment to the full and complete multi-purpose Portugues Dam, and agreed to pay the additional costs required for the phased construction.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$442,700,000 is an \$8,400,000 increase over the estimate (\$434,300,000) last presented to Congress (FY 2005). This change includes the following items:

Item	Amount
Schedule & Price escalation construction feature	\$1,005,000
Design Changes	7,395,000
Total	\$8,400,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with CEQ on 25 February 1974. A Supplemental EIS for the Portugues Dam was submitted in November 1992.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1972. Funds to initiate construction were appropriated in Fiscal Year 1975.

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS

Channels and Canals			
Estimated Federal Cost			117,697,000
Programmed Construction		117,697,000	
Estimated Non-Federal Costs			61,970,000
Programmed Construction		61,970,000	
Cash Contributions	3,589,000		
Other Costs	58,381,000		
Total Estimated Programmed Construction Cost			179,667,000
Total Estimated Project Cost			179,667,000

REMAINING BENEFIT - COST RATIO: Not applicable because construction is substantially complete.

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS (Continued)

Cerrillos Dam

Estimated Total Appropriation Requirement	229,703,000
Future Non-Federal Reimbursement (Water Supply)	213,974,000
Estimated Federal Cost Ultimate	15,729,000
Estimated Non-Federal Cost Ultimate	246,504,000
Cash Contributions	7,202,000
Other Costs	25,328,000
Reimbursement:	
Water Supply	213,974,000
Total Estimated Project Cost	262,233,000

REMAINING BENEFIT-REMAINING COST RATION: Not applicable because construction is substantially complete.

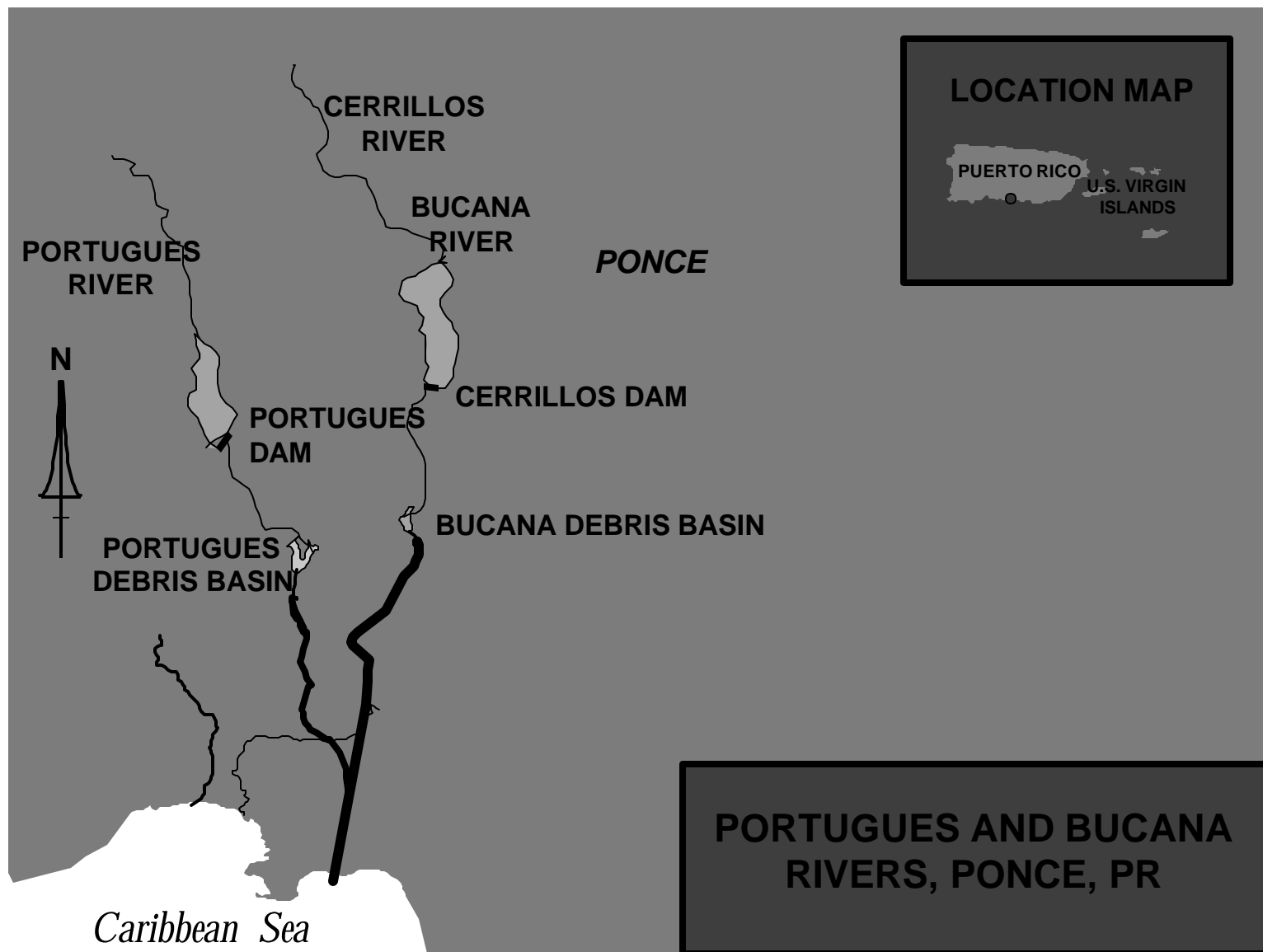
SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS (Continued)

Portugues Dam

Estimated Total Appropriation Requirement		95,300,000
Programmed Construction	95,300,000	
Unprogrammed Construction	0	
Estimated Non-Federal Cost		57,400,000
Programmed Construction	33,638,000	
Cash Contribution	20,875,000	
Other Costs	12,763,000	
Unprogrammed Construction	23,762,000	
Cash Contributions	23,762,000	
Other Costs	0	
Total Estimated Programmed Construction Cost		128,938,000
Total Estimated Unprogrammed Construction Cost		23,762,000
Total Estimated Project Cost		152,700,000

REMAINING BENEFIT-REMAINING COST RATIO: 6.8 to 1 at 5-7/8 percent.

TOTAL BENEFIT-COST RATIO: 4.1 to 1 at 5-7/8 percent.



APPROPRIATION TITLE: Construction, General - Local Protection Project (Flood Control)

PROJECT: Rio Puerto Nuevo, Puerto Rico (Continuing)

LOCATION: The Rio Puerto Nuevo drainage basin is located within the San Juan Metropolitan Area along the northern coast of Puerto Rico. The basin joins the southeast side of San Juan Harbor and extends south and up into the foothills of the central mountains of Puerto Rico. The basin is traversed by the Rio Piedras, Rio Puerto Nuevo, Quebrada Margarita, Quebrada Josefina, Quebrada Dona Ana, Quebrada Buena Vista, and Quebrada Guaracanal.

DESCRIPTION: The proposed plan calls for improvements to 11.2 miles of the existing channels of Rio Puerto Nuevo and Rio Piedras and five tributaries of the Rio Puerto Nuevo drainage basin. The project is designed to provide 100-year flood protection for the areas adjacent to the Puerto Nuevo and its tributaries. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 3.0 to 1 at 5 7/8 percent. 4.7 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 3.0 to 1 at 5-7/8 percent.

INITIAL BENEFIT - COST RATIO: 3.0 to 1 at 6-3/8 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the economic analyses performed for the revised General Design Memorandum dated June 1991 at October 1989 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	339,500,000		Relocations	45	TBD
			Roads, Railroads, Bridges	45	TBD
Estimated Non-Federal Cost	118,700,000		Channels and Canals	35	TBD
Cash Contributions	52,236,000		Recreation	0	TBD
Other Costs	66,464,000				
Total Estimated Project Costs	458,200,000		Entire Project	35	TBD
Allocations to 30 September 2004	119,667,000				
Conference Allowance for FY 2005	14,500,000				
Allocation for FY 2005	12,882,000	1/			
Allocations through FY 2005	132,549,000	39%			
Allocation Requested for 2006	20,000,000	45%			
Programmed Balance to Complete after FY 2006	186,951,000				
Unprogrammed Balance to Complete after FY 2006					

1/ Reflects \$1,514,000 assigned as savings and slippage and \$104,000 rescission.

#### PHYSICAL DATA

Relocations - Bridges (Replacement)	17
Relocations - Bridges (Modification)	8
Relocations - Bridges (Construction)	5
Canals - Miles	11.2
Debris Basins	2
Stilling Areas	2

Division: South Atlantic

District: Jacksonville

Rio Puerto Nuevo, PR

7 February 2005

60

JUSTIFICATION: The intense development in the basin has altered the natural discharge patterns, significantly increased the runoff rates and restricted the flows in the flood plain. There are over 240,000 people living in the 25 square mile drainage basin. The area is over 90% developed. Development has progressed to the point where some of the tributary channels are not capable of carrying the two-year storm without causing flooding. In many areas, houses and other buildings are built adjacent to the banks of the channels and further restrict flood flows. Over 5,700 families would be subject to flooding from the 100-year storm under existing conditions. The average annual rainfall is about 71 inches. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	66,750,000
Total	66,750,000

FISCAL YEAR 2006: If adequate funds were available, the following items could be accomplished.

Roads, Railroads, Bridges	\$ 5,778,000
Channels and Canals	11,932,000
Planning, Engineering, and Design	770,000
Supervision and Administration	1,520,000
Total	\$20,000,000



NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below for programmed work.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, right-of-way, and dredged material disposal areas.	26,393,000	0
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	40,071,000	0
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.	402,000	0
Pay 12.37 percent of the first costs allocated to flood control, and bear all cost of operation, maintenance, repair, rehabilitation, and replacement of flood control structures.	51,834,000	0
Total Non-Federal Costs	118,700,000	0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. A Project Cooperation Agreement for the project was executed in March 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimates of \$339,500,000 is a \$1,200,000 increase over the estimate (\$338,300,000) last presented to Congress (FY 2005). This change includes the following items:

Item	Amount
Price escalation on construction features	\$ 4,000,000
Post contract award and other estimating adjustments	- 2,800,000
Total	\$1,200,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Environmental Impact Statement for the project was filed on 6 December 1985. The Finding of No Significant Impact (FONSI) was approved in July 1992.

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in Fiscal Year 1987. Funds to initiate construction were appropriated in Fiscal Year 1994.

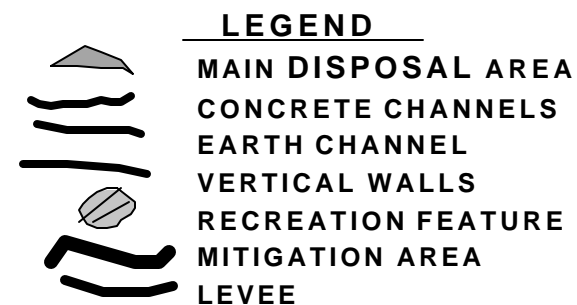
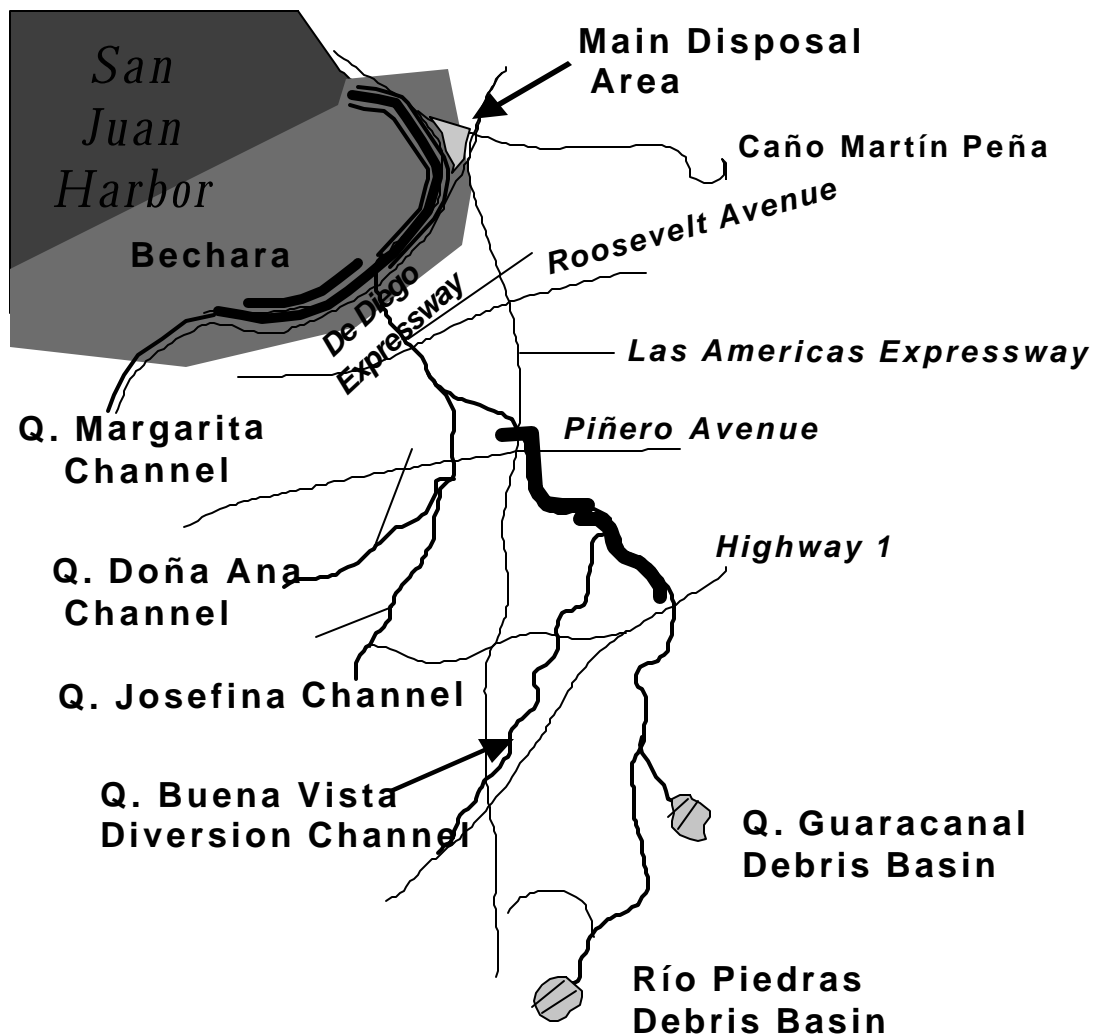
Division: South Atlantic

District: Jacksonville

Rio Puerto Nuevo, PR

7 February 2005

62



APPROPRIATION TITLE: Construction, General - Multiple Purpose Power

PROJECT: Richard B. Russell Dam and Lake, Georgia and South Carolina (Continuing)

LOCATION: The project is located on the Savannah River about 275 miles above the mouth, 16 miles southeast of Elberton, Georgia and between the existing J. Strom Thurmond and Hartwell Lakes.

DESCRIPTION: The project consists of a concrete gravity-type dam, flanked by earth embankments with a maximum height of 200 feet above the river. The total length of 5,616 feet consists of a 1,884-foot concrete section and embankments of 3,732 feet. The gate-controlled spillway has a design capacity of 800,000 c.f.s. The project includes the installation of 328 megawatts of conventional power completed in January 1986 and 320 megawatts of reversible pumped storage power for a total available capacity of 648 megawatts.

AUTHORIZATION: Flood Control Act of 1966, modified by the Water Resources Development Act of 1976 and the Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because project construction is substantially complete.

TOTAL BENEFIT - COST RATIO: 1.9 to 1 at 3 1/4 percent.

INITIAL BENEFIT - COST RATIO: 2.0 to 1 at 3 1/4 percent (FY 1972).

BASIS OF BENEFIT - COST RATIO: Benefits are from the cost allocation study completed in December 1991 at October 1991 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$624,100,000		Entire Project	98	TBD
Future Non-Federal Reimbursement	590,583,000				
Estimated Federal Cost (Ultimate)	33,517,000				
Estimated Non-Federal Cost	592,483,000				
Cash Contributions	1,900,000				
Reimbursements	590,583,000				
Power	590,583,000				
Total Estimated Project Cost	626,000,000				
Allocations to 30 September 2004	611,631,000				
Conference Allowance for FY 2005	4,600,000				
Allocation for FY 2005	4,087,000	<u>1/</u>			
Allocations through FY 2005	615,718,000	99%			
Allocation Requested for FY 2006	1,300,000	99%			
Programmed Balance to Complete after FY 2006	7,082,000				
Unprogrammed Balance to Complete after FY 2006	0				

1/ Reflects \$480,000 reduction as savings and slippage and \$33,000 rescission.

# PHYSICAL DATA

Dam		Relocations-Roads (Miles)	19.5
Type: Concrete Gravity, flanked by earth embankments		Railroads (Miles)	9.1
Maximum Height (Feet)	200	Initial Power Installation	
Length		4 Conventional Units (MW)	82
Concrete Section (Feet)	1,884	4 Pump Storage Units (MW)	80
Embankments (Feet)	3,732	Normal Average Head (Feet)	144
Spillway		Reservoir Capacity (Acre-feet)	
Type: Gate Controlled		Flood Control	140,000
Design Capacity (c.f.s)	800,00	Power	126,800
Lands and Damages (Acres)	0	Dead Storage	899,400
Type: Predominantly timber and Agricultural	53,112		
Improvements: Typical farm units			

JUSTIFICATION: The 648 megawatts installation, including pumped storage, will help meet the increased power requirements and rapid growth demands in this region. The output can be marketed and fully utilized immediately upon project completion in Federal Energy Regulatory Commission (FERC) supply areas 21, 22, and 23. This includes all of South Carolina, most of North Carolina, Georgia, Alabama, and parts of Mississippi and Florida. The FERC has stated repeatedly the need for this power source. This project will be an integral unit of the plan for development of the Savannah River Basin for flood control, navigation, power, and allied purposes. The recreational facilities will serve an area within a large zone of influences surrounding the three-lake complex of J. Strom Thurmond, Hartwell, and Richard B. Russell lakes. The estimated initial visitation at the project was 1,000,000 and should exceed 4,600,000 in the early 2000's. Average annual benefits are as follows:

Annual Benefits	Amount
Power	\$ 52,995,000
Flood Control	177,000
Recreation	3,597,000
Fish and Wildlife	71,000
Area Redevelopment	4,212,000
Total	\$ 61,052,000

FISCAL YEAR 2006: The requested amount will be applied as follows:

Continue environmental monitoring of pumped storage operation	\$550,000
Install Main Circuit Breakers (Units 1-4)	575,000
Planning, Engineering and Design	125,000
Construction Management	50,000
Total	\$1,300,000

NON-FEDERAL COST: In accordance with Public Law 89-72, agreements for recreation development with the States of Georgia and South Carolina have been executed and were approved by the Secretary of the Army 20 May 1974. The costs allocable to power are reimbursable, and will be reviewed and adjusted, based on construction costs when the project becomes operational.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of local Cooperation		
Capital Cost allocated to power.	590,583,000	3,557,000
Pay, contribute in kind, or repay (repayment not to exceed 50 years) with interest, one-half of the separable costs allocated to recreation.	1,900,000	0
Bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	0	249,000
Total Non-Federal Costs	592,483,000	3,806,000

STATUS OF LOCAL COOPERATION: The State of Georgia began payments for recreation reimbursements in May 1985. The State of South Carolina began payments in August 1985. Responsibility for repayment of power costs rests with the Southeastern Power Administration pursuant to Federal Laws.

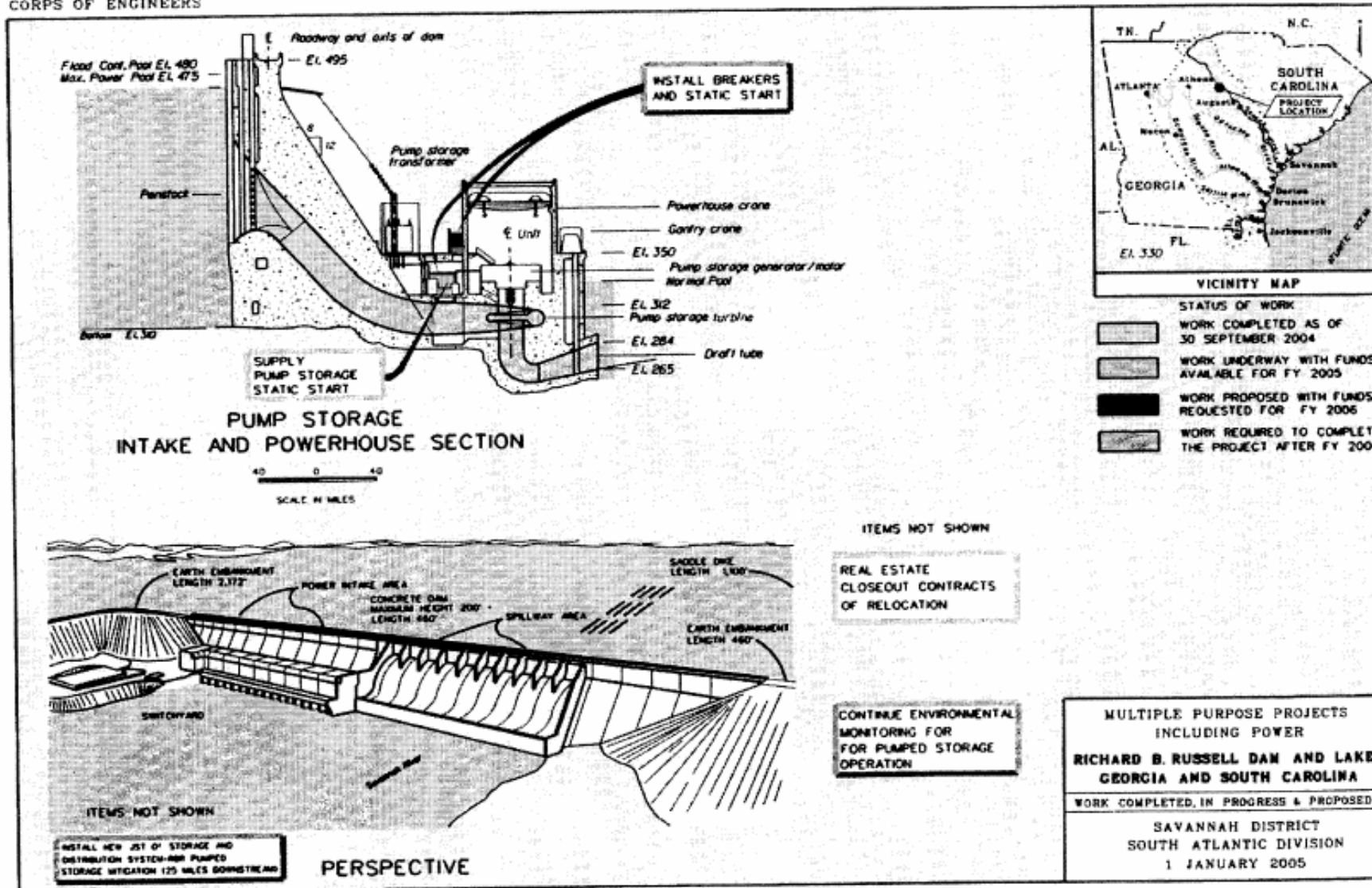
COMPARISON OF FEDERA COST ESTIMATES: The current Federal (Corps) cost estimate of \$626,000,000 is the same as the latest estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) on conventional installation was submitted to Council on Environmental Quality (CEQ) on 31 May 1974. A supplement on water quality to the final EIS was filed with CEQ in May 1976. The final EIS on pumped storage was filed with the Environmental Protection Agency (EPA) in October 1979. The Supplement on fish and wildlife mitigation to the final EIS was filed with the EPA in December 1981. A supplement to the final EIS on pumped storage was filed in August 1991. A final NEPA document (Environmental Assessment) now based on 4 ½ years of environmental testing is complete. It embodies those technical items that the Corps of Engineers (COE) and South Carolina have reached agreement on, relating to operational measures, construction of a O<sub>2</sub> system to increase fish habitat and continued environmental monitoring of a commercial operation. The EA for Pumped Storage was completed in FY 1999 and the FONSI was signed in August 1999.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1968. Funds to initiate land acquisition were appropriated in FY 1971 and allocated in FY 1972. Initial construction funds were appropriated in FY 1975.

In accordance with the NEPA Decision previously signed in August 1999, the District agreed to construct an oxygenation system in JST Lake to mitigate potential summer time temperature impact to the striped bass habitat in the tailwater regime below RBR Dam. The O<sub>2</sub> system is designed to enhance fish habitat and it is located near Madoc about 5 miles above JST Dam. Also, in accordance with the NEPA document, the Corps is required to continue environmental monitoring for seven years, five of which must cover the plan 5 year round capability using 4 pump units. The District has agreed to limit pumping to two units from June to September to facilitate construction of the O<sub>2</sub> system prior to using 4 pump units in the summer months.

Pumped Storage was declared commercially available on 1 September 2002 with a favorable decision from U.S. District Court granted 03 May 2002. That hearing on the Corps' request for summary judgment to dismiss the injunction was conducted on 17 October 2000 in the Charleston, SC U.S. District Court.





APPROPRIATION TITLE: Construction, General – Environmental Restoration

PROJECT: South Florida Everglades Ecosystem Restoration, Florida (Continuing)

LOCATION: The South Florida Everglades Ecosystem Restoration Program stretches from the Southern Orlando area southward across the Everglades, the Florida Keys and the contiguous and near-shore waters of South Florida. This project encompasses an area of approximately 18,000 square miles, which includes all or part of 18 counties in the southeast part of the State of Florida. Principle areas are the Kissimmee River Basin, Lake Okeechobee, Everglades Agricultural Area, Upper East Coast, Lower East Coast, Big Cypress Basin, Water Conservations Areas, Everglades National Park, Southwest Florida, Florida Bay and the Florida Keys.

DESCRIPTION: The South Florida Everglades Ecosystem Restoration Program includes the Central and Southern Florida Project (C&SF), the Kissimmee River Restoration Project, and the Everglades and South Florida Restoration Projects, which were previously budgeted separately. In addition, this request incorporates a share of the federal costs of the Modified Water Deliveries Project, which was previously budgeted entirely within the National Park Service's Construction account. The consolidated budget request herein includes the following separable elements: West Palm Beach Canal, South Dade County, Comprehensive Everglades Restoration Plan, and Manatee Pass Thru Gates, (previously separable elements under the C&SF Project); East Coast Canal Structures, Western C-11 Basin, Seminole Big Cypress, Ten Mile Creek, Tamiami Trail (Western Segment), Florida Keys Carrying Capacity, Lake Okeechobee Water Retention, Southern CREW, and Lake Trafford (previously separable elements under the Everglades and South Florida Ecosystem Restoration Project); Kissimmee River Project; and the Modified Water Deliveries to Everglades National Park Project. The objective of the South Florida Everglades Ecosystem Restoration Program is to restore, protect and preserve the south Florida ecosystem while providing for other water related needs of the regions, including the Everglades.

The C&SF Project includes 1,000 miles of canals, 720 miles of levees and several hundred water control structures, while providing water supply, flood protection, water management and other benefits to south Florida.

The Everglades and South Florida Ecosystem Restoration Project separable elements must meet the following criteria: be within the C&SF Project and its near shore waters; provide immediate, independent, and substantial ecosystem restoration, protection, and preservation benefits; cost less than \$25 million in Federal funds, be consistent with the Governor's Commission's Conceptual Plan; and have a local sponsor to contribute a minimum of 50% of the total project cost.

The Kissimmee River basin is approximately 3,000 square miles in size and has two component parts; the upper basin, referred to as the Headwaters Revitalization, and the lower basin, referred to as the Kissimmee River Restoration. The upper basin portion of the project consists of water regulation schedule modifications, canal and structure improvements, and land acquisition. This will result in environmental benefits in the upper chain of lakes and in the lower basin. More natural fluctuations of water levels will enhance the peripheral marshes of the lakes. Reestablishing a more natural timing of flows to the lower basin will result in restoration of the Kissimmee River ecosystem. Structural improvements will include enlargements of existing canals and existing water control structures. The Kissimmee River project is addressing restoration of natural flooding of the floodplain to reestablish historic wetland conditions. Construction will include backfilling approximately 22 miles of the C-38 canal, excavating approximately 9 miles of new river channel, and removing 2 water control structures and locks in the backfilled sections. The project will also include acquisition of fee title for lands within the 5-year-floodplain and acquisition of flowage easements for lands between the five-year-flood line and the 100-year-flood line.

#### DESCRIPTION CON'T:

The Modified Water Deliveries to Everglades National Park (MWD) involves construction of modifications to the C&SF Project water management system and related operational changes to provide improved water deliveries to Everglades National Park (ENP). The project consists of structural features with the intended purpose of restoring conveyance between Water Conservation Areas (WCA) north of ENP and the Shark River Slough within the Park. It will also provide flood mitigation to the 8.5 Square Mile Area (SMA), a residential area adjacent to the Park expansion boundary in East Everglades. For management purposes, the project is described in four categories: 8.5 SMA, Conveyance and Seepage Control, Tamiami Trail (Eastern Segment), and Project Implementation Support (ENP requirements, Experimental Program, Cape Sable Seaside Sparrow Emergency, Combined Structural and Operational Plan, Environmental Monitoring, and Osceola Camp).

AUTHORIZATION: Flood Control Acts of 1948, 1954, 1960, 1962, 1965, and 1968; Authorization in 1970 under Section 201 of the Flood Control Act of 1965, and the Water Resources Development Acts of 1986, 1988, 1990, 1992, 1996, 1999, and 2000. The Modified Water Deliveries to Everglades National Park was authorized under the Everglades Expansion Act of 1989 (PL 101-229). PL 101-229 specifically directs the Secretary of the Army, in consultation with the Secretary of Interior, to construct modifications to the C&SF Project to improve water deliveries to ENP, but does not authorize the use of Civil Works funds. The budget proposes appropriations legislation to use \$35 million of Civil Works funds for Modified Water Deliveries.

REMAINING BENEFIT - REMAINING COST RATIO: NA

TOTAL BENEFIT - COST RATIO: NA

INITIAL BENEFIT - COST RATIO: NA

BASIS OF BENEFIT - COST RATIO: NA

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (CoE)		2,969,663,000		Misc. Completed Works	100	Oct 1992
Programmed Construction	2,351,275,000			Everglades Restoration	23	Indefinite
Unprogrammed Construction	618,388,000			West Palm Beach	70	TBD
				South Dade County	45	TBD
Estimated Federal Cost (OFA)		313,155,000		Manatee Pass Gates	28	Sep 2006
Programmed Construction	313,155,000			E Coast Canal	100	Sep 2004
Unprogrammed Construction	0			Western C-11	100	Sep 2006
Estimated Non-Federal Cost		2,227,800,000		Seminole Big Cypress	17	Sep 2007
Programmed Construction	1,870,689,000			Ten Mile Creek	62	Sep 2006
Cash Contributions	236,410,000			Tamiami Trail (Western)		NA
Other Costs	1,634,279,000			Florida Keys Carrying	100	Dec 2004
Unprogrammed Construction	357,111,000			Lake Okeechobee	50	Sep 2006
Cash Contributions	173,446,000			Southern CREW		NA
Other Costs	183,665,000			Lake Trafford		NA
Total Estimated Programmed Construction Cost		4,535,119,000		Kissimmee	40	TBD
Total Estimated Unprogrammed Construction Cost		975,499,000		Mod Water Del	40	TBD
Total Estimated Project Cost		5,510,618,000				
Allocations to 30 September 2004		852,624,000		Entire Project	23	Indefinite
Conference Allowance for FY 2005		119,000,000				
Allocation for FY 2005		105,718,000	1/			
Allocations through FY 2005		958,342,000	32%			
Allocation Requested for FY 2006		137,000,000	37%			
Programmed Balance to Complete after FY 2006		1,255,933,000				
Unprogrammed Balance to Complete after FY 2006		618,388,000				

1/ Reflects \$12,427,000 reduction assigned as savings and slippage and \$855,000 as rescission.

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005

72

## PHYSICAL DATA

Pumping Plants (Number)	38	Locks (Number)	25
Floodway Control & Diversion Structures (Number)	235	Canals (Miles)	999
Relocations-Highways (Bridges)	2	Levees (Miles)	1,008
Relocations-Railroads (Bridges)	58	Bridge	7
Canals - New River Channel	9		
Water Control Structures Removal	2		

### JUSTIFICATION:

The Central and Southern Florida Project: The Central and Southern Florida project was originally authorized and designed as a flood control project in response to the maximum flood of record in 1947. Existing damages, without the project, were \$59,693,000 (\$366,903,000 at 1 October 1989 price levels). The 1947 flood frequency averages 1 in 25 years over the project area, with an average duration of 70 days. Minor floods occur almost yearly in the project area and major floods occur frequently. This situation is aggravated by wet antecedent conditions followed by heavy seasonal rainfall. The average degree of protection provided by the completed project is about a 10-year flood frequency protection. Approximately 2,853,700 acres are protected. This encompasses 2,765,100 agricultural acres and 88,600 urban acres. The present value of property subject to flood damages is about \$12.3 billion. Property types include residential, commercial, industrial, public, and agricultural.

Average annual damages without the project would be \$110,580,000 and \$22,536,000 with the project. Damages attributable to urban property are 16.7 percent and 83.3 percent are attributable to rural property. The proportion of average annual damages prevented is 36.8 percent to existing development and 63.2 percent to future development.

Under Public Law 90-483 (River and Harbor Act of 1968), additional project features for the purpose of water supply were added to the Central and Southern Florida project. The storage capacity of the entire project is 2,953,000 average annual acre-feet divided into approximately 1,600,000 acre-feet for urban use by 2020 and 740,000 acre-feet for agricultural use by 2020. The Everglades National Park receives virtually its entire source of water (other than direct rainfall) from the Central and Southern Florida Project. The pumping rate for irrigation of 590 square miles would yield approximately 917,850 acre-feet per year for agricultural use. Recurrent drought conditions with resultant low flows require supplemental irrigation to ensure adequate crops yields.

JUSTIFICATION CONT:

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	235,213,000
Municipal and Industrial Water Supply	25,664,000
Agricultural Water Supply	27,614,000
Recreation	11,109,000
Fish and Wildlife	238,000
Area Redevelopment	3,012,000
Total	302,850,000

The Modified Water Deliveries to Everglades National Park and South Dade County (C-111) Projects: Public Law 90-483 and Public Law 101-229 (Everglades National Park Protection and Expansion Act) has authorized modifications to the project for environmental restoration in the C-111 basin and NW Shark River Slough. The South Dade County effort will restore natural hydrologic conditions in Taylor Slough within Everglades National Park for the purpose of restoring the historic diversity and abundance of the native flora and fauna. Modified Water Deliveries will restore natural hydrological flows to Shark River Slough at the northeastern corner of the Park.

Everglades and South Florida Ecosystem Restoration Project: WRDA 1996 authorized implementation of the Everglades and South Florida Ecosystem Restoration Project in order to provide immediate, independent, and substantial ecosystem restoration, protection and preservation benefits. The projects were justified on the basis of those benefits.

Kissimmee River Restoration Project: Local water resource development of the Kissimmee River began in the late 1800's. In the 1960's, the river was channelized as part of the comprehensive Central and Southern Florida Project. Although the project has provided continuing navigation and effective flood control, it also resulted in long-term degradation of the natural ecosystem. The 103-mile river that historically meandered across and inundated about 35,000 acres of wetlands over a broad flood plain was reduced to a 56-mile canal that has successfully contained almost all flows since its completion. The channelization coupled with the modifications of the Lower Basin tributary watersheds and efficient control of floodwaters and regulation of inflows from the Upper Basin significantly altered hydrologic characteristics of the ecosystem. Project formulation and scoping was not based on traditional economic benefit-cost analyses and net benefit optimization; rather, the plan was based on the most cost effective plan which would meet fish and wildlife resources objectives for restoring ecological integrity. As a result, project construction will result in the restoration of 52 miles of river; 27,000 acres of wetlands; improved water quality characteristics for the Kissimmee River; and restored conditions for over 300 fish and wildlife species.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Central and Southern Florida

Continue construction of channels, canals, and pumping plants for South Dade County	\$ 3,189,000
Continue construction of PSTA for West Palm Beach Canal	576,000
Continue construction of locks, channels, and canals for Manatee Pass-Through Gates	2,272,000
Continue the feasibility phase of the Central and Southern Florida Project (CERP)	3,447,000
Installation and Testing of Pilot Projects as Preconstruction, Engineering and Design (ASR)	4,150,000
Engineering and Design for South Dade County	1,324,000
Engineering and Design for Manatee Pass-Through Gates	396,000
Engineering and Design for Comprehensive Everglades Restoration Plan (CERP)	59,753,000
Engineering and design for West Palm Beach Canal	734,000
Construction Management	985,000
Subtotal	\$ 76,826,000

Kissimmee

Continue construction of channels, canals, and floodway control structures	\$ 8,249,000
Planning, Engineering, and Design/Monitoring	3,723,000
Construction Management	1,202,000
Subtotal	\$13,174,000

Everglades and South Florida Ecosystem Restoration

Construction of channels and canals	\$ 8,375,000
Construction of reservoirs	1,625,000
Planning, Engineering and Design	732,000
Construction Management	1,268,000
Subtotal	\$12,000,000

Modified Water Deliveries to Everglades National Park

Continue Construction of channels, canals, and pumping plants at 8.5 Square Mile Area	\$ 20,300,000
Engineering and Design on Conveyance and Seepage	1,000,000
Engineering and Design on Tamiami Trail (Eastern Segment)	8,000,000
Project Implementation Support	4,000,000
Construction Management	1,700,000
Subtotal	\$35,000,000

Total	\$137,000,000
-------	---------------

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in specific authorizing legislation and the Water Resources Development Act of 1986, 1996 and 2000 as applicable, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
West Palm Beach Canal		
Provide lands, easements, rights of way, and dredged material disposal areas.	11,129,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	1,400,000	
Pay 12.8 percent of the separable costs allocated to flood control and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of facilities.	19,671,000	289,800
Total Non-Federal Costs	32,200,000	289,800
 South Dade County		
Provide lands, easements, rights of way, and dredged material disposal areas.	122,120,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	330,000	
Pay one-half of the cost of the project assigned to flood control and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	18,950,000	845,000
Total Non-Federal Costs	141,400,000	845,000
 Manatee Pass-Through Gates		
Pay applicable percentage based upon authorized cost share for each particular project.	2,200,000	
Total Non-Federal Costs	2,200,000	

NON-FEDERAL COST CON'T:

Requirements of local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Comprehensive Everglades Restoration Plan		
Provide lands, easements, rights of way, and dredged material disposal areas.	718,948,000	
Pay one-half of the cost of the project assigned to flood control and bear one half of the cost of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	459,137,000	
Total Non-Federal Costs	1,178,085,000	
Completed C&SF Works		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	212,940,000	
Cash Contribution/WIK	232,275,000	
Total Non-Federal Costs Total	445,215,000	



NON-FEDERAL COST CON'T

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Kissimmee		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$ 191,485,000	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	7,027,000	
Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	87,188,000	
Total Non-Federal Costs	285,700,000	

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
East Coast Canal Structures		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	0	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	1,796,000	150,000
Total Non-Federal Costs	1,796,000	150,000

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005

78

NON-FEDERAL COST CON'T

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Western C-11 Basin		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	0	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	9,080,000	310,000
Total Non-Federal Costs	9,080,000	310,000

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Seminole Big Cypress		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	4,836,000	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 50 percent of the costs allocated to environmental restoration, and pay 50% costs of operation, maintenance, repair, rehabilitation, and replacement.	20,749,000	600,000
Total Non-Federal Costs	25,585,000	600,000

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005

79

NON-FEDERAL COST CON'T

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Ten Mile Creek		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	5,127,000	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	13,903,000	660,000
Total Non-Federal Costs	19,030,000	660,000

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Tamiami Trail (Western Segment)		
Provide; with credit toward the non-Federal 84 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	0	
Modify or relocate; with credit toward the non-Federal 84 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 84 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	13,884,000	250,000
Total Non-Federal Costs	13,884,000	250,000

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005

80

NON-FEDERAL COST CON'T

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Florida Keys Carrying Capacity		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	0	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	3,000,000	
Total Non-Federal Costs	3,000,000	

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Lake Okeechobee Water retention & Phosphorus Removal		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	2,428,000	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	8,188,000	364,000
Total Non-Federal Costs	10,616,000	364,000

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005

81

# NON-FEDERAL COST CON'T

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
<b>Southern CREW</b>		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	29,000,000	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	2,568,000	175,000
<b>Total Non-Federal Costs</b>	<b>31,568,000</b>	<b>175,000</b>

	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
<b>Lake Trafford</b>		
Provide; with credit toward the non-Federal 95 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	1,342,000	
Modify or relocate; with credit toward the non-Federal 95 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 95 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	27,099,000	70,000
<b>Total Non-Federal Costs</b>	<b>28,441,000</b>	<b>70,000</b>

The Modified Water Deliveries Project does not involve Non-Federal Costs. The project is cost shared with the Department of Interior (Other Federal Agency).

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005

82

STATUS OF LOCAL COOPERATION: Assurances of local cooperation have been accepted from the local sponsor, the South Florida Water Management District, for all works authorized under the Central and Southern Florida project. The Project Cooperation Agreement for the South Dade County separable element was executed with the South Florida Water Management District in January 1995. The Design Agreement for the South Florida Water Management District segment of the Comprehensive Everglades Restoration Plan (CERP) was signed on 12 May 2000. Additional Design Agreements for CERP features are scheduled to be executed with Seminole Tribe of Florida, the Miccosukee Tribe of Florida, the Florida Department of Environmental Protection and Miami-Dade County.

The Kissimmee Project Cooperation Agreement reflects the cost sharing outlined in House Document 102-286 dated April 7, 1992 was executed with the South Florida Water Management District (SFWMD) in March 1994. The local sponsor will be required to provide a cash contribution of 11.4% (reflecting credit for lands, easements, rights of way, relocations, and disposal areas) of construction costs.

PCA's were executed 07 January 2000 for East Coast Canal Structures, Tamiami Trail Culverts, Western C-11, Seminole Big Cypress, Southern Crew, Lake Okeechobee Water Retention, 10-Mile Creek, and Lake Trafford. A PCA was executed Dec 1998 for Florida Keys Carrying Capacity. Local sponsors include: South Florida Water Management District (SFWMD), Seminole Tribe of Florida, and the Florida Department of Community Affairs (DCA).

PCA's were executed with the South Florida Water Management District September 1994 and July 2001 for the Modified Water Deliveries Project to implement modifications to the C&SF Project to improve water deliveries into Everglades National Park.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$2,969,663,000 is an increase of \$110,163,000 from the latest estimate (\$2,859,500,000) submitted to Congress (FY 2004). Note that these cost estimates reflect the combining of project data previously reported separately under three project justification sheets (Central and Southern Florida, Kissimmee River, Everglades and South Florida Ecosystem Restoration projects). The authorized Modified Water Deliveries to Everglades National Park project included the revised cost estimates below was previously budgeted entirely within the National Park Service's Construction request. The changes include the following items:

Item	Amount
Price Escalation on Construction Features	(8,646,000)
Design Changes	(15,336,000)
Post Contract Award & Other Estimating Adj	2,132,000
Schedule Changes	750,000
Added Authorized Modification of Mod Waters Project	131,263,000
Total	110,163,000

#### STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

The latest Programmatic Environmental Impact Statement for Central and Southern Florida project was the Comprehensive Review Study in April 1999.

The final Environmental Impact Statement for the Kissimmee project was filed with CEQ on April 5, 1992. A supplement to the Environmental Impact Statement was integrated into the Upper Basin project modification report.

Appropriate NEPA documents were prepared and finalized prior to execution of the PCA for East Coast Canal Structures, Tamiami Trail Culverts (Western Segment) , Western C-11, Seminole Big Cypress, Southern Crew, Lake Okeechobee Water Retention, 10-Mile Creek, and Lake Trafford. A PCA was executed Dec 1998 for the Florida Keys Carrying Capacity Study.

OTHER INFORMATION: Funds to initiate preconstruction planning and construction on the original Central and Southern Florida project were appropriated in FY 1950.

The Everglades National Park Protection and Expansion Act, signed 13 December 1989, authorized construction of structural works required for improved water deliveries to Shark River Slough in Everglades National Park, construction of flood mitigation works for the residential area in the East Everglades, and acquisition of 107,600 acres of privately owned wetlands in the East Everglades. The Department of the Interior and the State of Florida acquired the lands included in the ENP expansion area and the Secretary of the Army has responsibility for constructing all project modifications. Under the initial implementation plan, funds were appropriated to the National Park Service and transferred to the Corps of Engineers for this purpose. Increases in the complexity of the project and the cost of materials have led to a new funding strategy. Beginning in FY2006, Federal funding for implementation of this project will be requested under both the National Park Service and the Corps of Engineers appropriations request.

Modifications to the C&SF, South Dade County separable element to improve the natural resources in Taylor Slough in Everglades National Park have been funded through the Corps Central and Southern Florida project appropriation.

The Kissimmee Restoration Project was authorized by the Water Resources Development Act of 1992. The project cooperation agreement was executed in March 1994. Engineering and design is underway, and construction was initiated in Fiscal Year 1997.

The Water Resources Development Act of 1992 authorizes the Chief of Engineers to review the Central and Southern Florida project to determine whether modifications to the existing project are advisable at the present time due to significantly changed physical, biological, demographic, or economic conditions, with particular reference to modifying the project or its operation for improving the quality of the environment, improving protection of the aquifer, and improving the integrity, capability, and conservation of urban water supplies affected by the project or its operation. The central organizing theme of the Comprehensive Restudy was the restoration of the South Florida ecosystem while accommodating other demands for water and related land resources in south Florida. Recognizing the complexity of ecological restoration and the extensive interaction between the ecosystem and other uses of water and related land resources, oversight of the reconnaissance level study effort was provided by the interagency South Florida Ecosystem Restoration Task Force, which continues to provide policy guidance, study coordination, and appropriate agency participation. The Water Resources Development Act of 1996 (Section 528) required that the Comprehensive Restudy feasibility report be submitted to Congress, along with a Programmatic Environmental Impact Statement, in July 1999. The Final Integrated Feasibility Report and Programmatic Environmental Impact Statement was submitted to

Congress on 01 July 1999. The Energy and Water Appropriations Act of FY 2000, Public Law 106-50 authorized funds for the Government to initiate design of elements of the Comprehensive Plan for the Everglades and South Florida Ecosystem Restoration Project.

The Water Resources Development Act of 1996 also legislatively established the Task Force and expanded its membership to include State and local agency representatives. The Task Force is providing assistance to the Comprehensive Restoration Plan Program.

The Indian River Lagoon South Feasibility Study was initiated in 1996. This study evaluated potential modifications to the Central and South Florida Project for ecological restoration of Indian River Lagoon system. A final feasibility report, which included components of the Comprehensive Plan, was submitted to HQUSACE in FY02. The Project Implementation Report (PIR), required by WRDA 2000, for Indian River Lagoon South was completed August 2004. A Chief's Report on the PIR was signed 04 August 2004.



#### OTHER INFORMATION CON'T:

The Picayune Strand Project Implementation Report was completed in December 2004.

The Water Resources Development Act 2000 authorized the Comprehensive Everglades Restoration Plan as the framework for modifications and operational changes to the Central & Southern Florida Project. In addition, specific authorization was provided for 10 projects totaling \$1.1 billion (including \$100 million for adaptive assessment and monitoring programs) and 4 pilot projects totaling \$69 million, and to allow for implementation of projects under a programmatic authority, not to exceed \$206 million. Two additional pilot projects and part of the Comprehensive Everglades Restoration Plan were authorized in the Water Resources Development Act of 1999 for \$29 million.

Funds to initiate preconstruction planning for the Kissimmee River project were allocated in Fiscal Year 1992. Funds to initiate construction were allocated in Fiscal Year 1997.

The Everglades and South Florida Ecosystem Restoration project authorization limits total federal funding to \$75 million, however local sponsors have elected, on some projects, to fund more than 50% of project costs to complete those projects.

#### SUMMARIZED FINANCIAL DATA

##### C&SF Miscellaneous Completed Work

Estimate Federal Cost		935,944,000
Estimated Non-Federal Cost		445,215,000
Cash Contributions	232,275,000	
Other Costs	212,940,000	
Total Estimated Project Cost		1,381,159,000

SUMMARIZED FINANCIAL DATA (Continued)

Modified Water Deliveries to Everglades National Park

Estimated Federal Cost (COE)			131,263,000
Programmed Construction	131,263,000		
Unprogrammed Construction	0		
Estimated Federal Cost (OFA)			267,155,000
Programmed Construction	267,155,000		
Unprogrammed Construction	0		
Estimated Non-Federal Cost			TBD
Programmed Construction		TBD	
Cash Contributions	TBD		
Other Costs	TBD		
Total Estimated Programmed Construction Cost			398,418,000
Total Estimated Unprogrammed Construction Cost			0
Total Estimated Project Cost			398,418,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA (Continued)

South Dade County

Estimated Federal Cost		141,500,000
Programmed Construction	141,500,000	
Unprogrammed Construction	0	
Estimated Non-Federal Cost		141,400,000
Programmed Construction	141,400,000	
Cash Contributions	18,950,000	
Other Costs	122,450,000	
Estimated Non-Federal Cost		
Unprogrammed Construction		0
Cash Contributions	0	
Other Costs	0	
Total Estimated Programmed Construction Cost		282,900,000
Total Estimated Unprogrammed Construction Cost		0
Total Estimated Project Cost		282,900,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA (Continued)

West Palm Beach Canal

Estimated Federal Cost (COE)		206,600,000	206,600,000
Programmed Construction		206,600,000	
Unprogrammed Construction		0	
Estimated Federal Cost (OFA)			46,000,000
Programmed Construction		46,000,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost			32,200,000
Programmed Construction		32,200,000	
Cash Contributions	19,671,000		
Other Costs	12,529,000		
Estimated Non-Federal Cost			
Unprogrammed Construction		0	
Cash Contributions	0		
Other Costs	0		
Total Estimated Programmed Construction Cost			284,800,000
Total Estimated Unprogrammed Construction Cost			0
Total Estimated Project Cost			284,800,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA (Continued)

Manatee Pass-Through Gates

Estimated Federal Cost			11,600,000
Programmed Construction		11,600,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost			2,200,000
Programmed Construction		2,200,000	
Cash Contributions	2,200,000		
Other Costs	0		
Estimated Non-Federal Cost			
Unprogrammed Construction		0	
Cash Contributions	0		
Other Costs	0		
Total Estimated Programmed Construction Cost			13,800,000
Total Estimated Unprogrammed Construction Cost			0
Total Estimated Project Cost			13,800,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA (Continued)

Comprehensive Everglades Restoration Plan

Estimated Federal Cost		1,183,095,000
Programmed Construction	1,183,095,000	
Unprogrammed Construction	0	
Estimated Non-Federal Cost		1,178,085,000
Programmed Construction	1,178,085,000	
Cash Contributions	13,988,000	
Other Costs	1,164,097,000	
Estimated Non-Federal Cost		
Unprogrammed Construction		0
Cash Contributions	0	
Other Costs	0	
Total Estimated Programmed Construction Cost		2,361,180,000
Total Estimated Unprogrammed Construction Cost		0
Total Estimated Project Cost		2,361,180,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA (Continued)

Lake Okeechobee

Estimate Federal Cost		10,533,000
Estimated Non-Federal Cost		10,616,000
Cash Contributions	6,038,000	
Other Costs	4,578,000	
Total Estimated Project Cost		21,149,000

Southern CREW

Estimate Federal Cost		1,753,000
Estimated Non-Federal Cost		31,568,000
Cash Contributions	2,262,000	
Other Costs	29,306,000	
Total Estimated Project Cost		33,321,000

East Coast Canal Structures

Estimate Federal Cost		1,902,000
Estimated Non-Federal Cost		1,796,000
Cash Contributions	1,571,000	
Other Costs	225,000	
Total Estimated Project Cost		3,698,000

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005

SUMMARIZED FINANCIAL DATA (Continued):

Western C-11 Basin

Estimate Federal Cost		9,235,000
Estimated Non-Federal Cost		9,080,000
Cash Contributions	8,477,000	
Other Costs	603,000	
Total Estimated Project Cost		18,315,000

Seminole Big Cypress

Estimate Federal Cost		24,286,000
Estimated Non-Federal Cost		25,585,000
Cash Contributions	18,250,000	
Other Costs	7,335,000	
Total Estimated Project Cost		49,871,000

Ten-Mile Creek

Estimate Federal Cost		19,028,000
Estimated Non-Federal Cost		19,030,000
Cash Contributions	13,128,000	
Other Costs	5,902,000	
Total Estimated Project Cost		38,058,000

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005



SUMMARIZED FINANCIAL DATA (Continued):

Tamiami Trail (Western Segment)

Estimate Federal Cost		2,622,000
Estimated Non-Federal Cost		13,884,000
Cash Contributions	0	
Other Costs	13,884,000	
Total Estimated Project Cost		16,506,000

Lake Trafford

Estimate Federal Cost		1,602,000
Estimated Non-Federal Cost		28,441,000
Cash Contributions	0	
Other Costs	28,441,000	
Total Estimated Project Cost		30,043,000

Keys Carrying Capacity

Estimate Federal Cost		3,000,000
Estimated Non-Federal Cost		3,000,000
Cash Contributions	1,500,000	
Other Costs	1,500,000	
Total Estimated Project Cost		6,000,000

Division: South Atlantic

District: Jacksonville

South Florida Everglades Ecosystem Restoration

7 February 2005

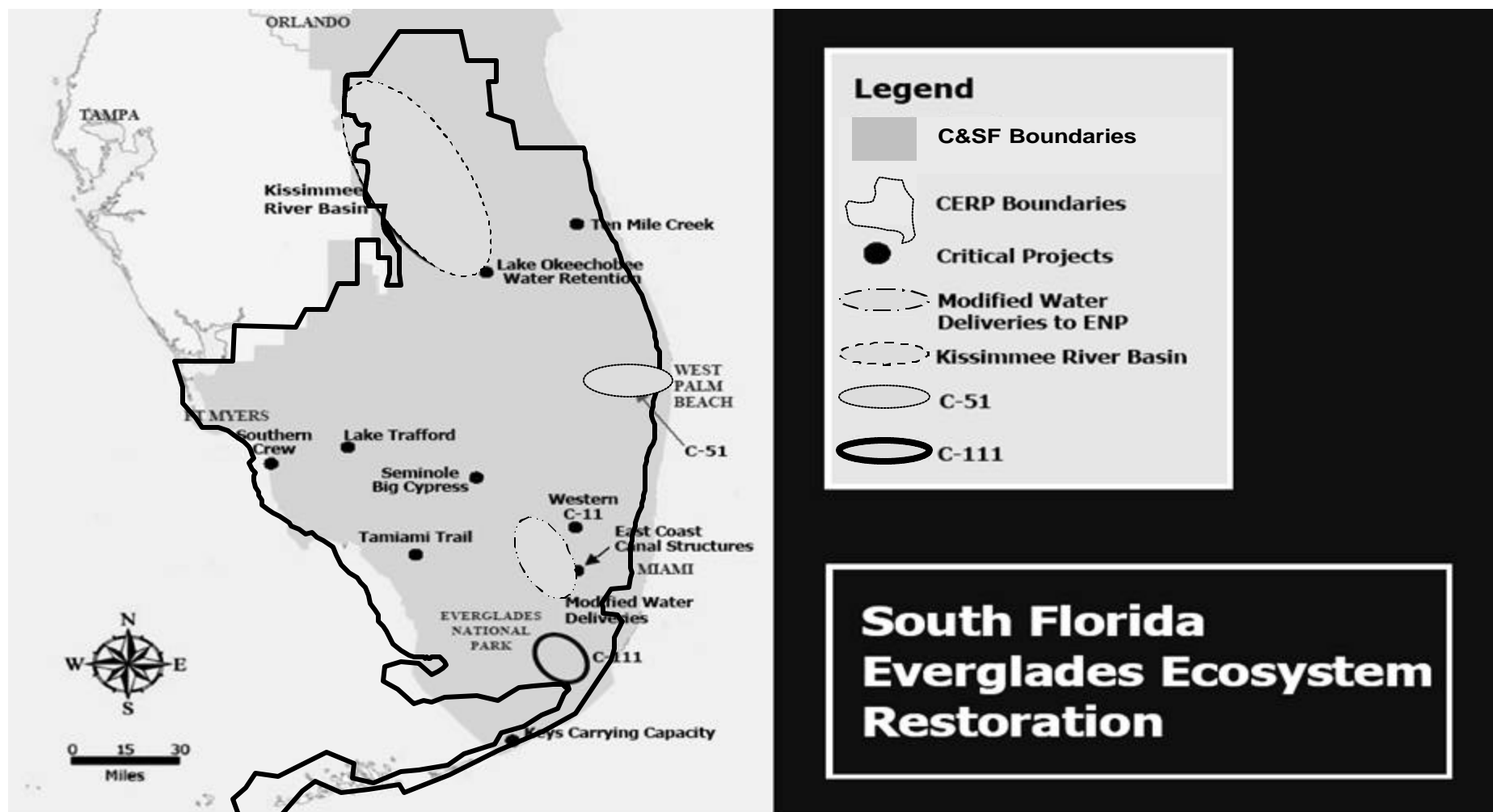
SUMMARIZED FINANCIAL DATA (Continued)

Kissimmee River

Estimated Federal Cost		285,700,000
Programmed Construction	285,700,000	
Unprogrammed Construction	0	
Estimated Non-Federal Cost		285,700,000
Programmed Construction	285,700,000	
Cash Contributions	71,546,000	
Other Costs	214,154,000	
Estimated Non-Federal Cost		
Unprogrammed Construction		0
Cash Contributions	0	
Other Costs	0	
Total Estimated Programmed Construction Cost		571,400,000
Total Estimated Unprogrammed Construction Cost		0
Total Estimated Project Cost		571,400,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable



APPROPRIATION TITLE: Construction General - Major Rehabilitation

PROJECT: Herbert Hoover Dike, FL (Continuing)

LOCATION: The Herbert Hoover Dike system encircles Lake Okeechobee entirely, except in the vicinity of Fisheating Creek on the western shore. The existing embankments total about 143 miles in length with typical crest elevations rising about 25 feet above adjacent land elevations. Reach 1 extends 22 miles from the Hillsboro Canal to the St. Lucie Canal in the southeast quadrant of the dike and Reaches 2 and 3 extend from Hillsboro Canal westward to C-43 (Caloosahatchee River).

DESCRIPTION: The Major Rehabilitation Report (MRR), approved in August 2000, involves construction of a seepage/drainage berm along the landslide toe of the dike. A value engineering (VE) study was done on Reach 1 MRR. The VE recommendation was a modified plan of the recommended plan in the MRR, and was expected to save several million dollars. The Detailed Design Report (DDR) analyzed the VE plan and determined too much flow through the section impacted local flood control. The VE was modified with a combination cutoff wall and seepage trench on the lakeside of the toe of the dike. This selected design is being applied throughout Reach 1A (from Port Mayaca, 4.6 miles southward) and is a basis for the design for the rest of the subreaches under Reach 1 (a total of 22.4 miles , southward of Port Mayaca).

AUTHORIZATION: Herbert Hoover Dike is a component of the Central and Southern Florida (C&SF) Project for Flood Control and Other Purposes. The C&SF Project was authorized in the Flood Control Act of 1948, 1954, 1958, 1960, 1965 and 1968; Authorization in 1970 under Section 201 of the Flood Control Act of 1965, the Water Resources Development Acts of 1986, 1988, 1990, 1992 and 1996 and the Rivers and Harbors Act of 1930.

REMAINING BENEFIT - REMAINING COST RATIO: .94 to 1 at 6 1/8 percent.

REMAINING BENEFIT - REMAINING COST RATIO: .96 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: .928 to 1 at 6 1/8 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest economic analyses performed for the November 2000 Major Rehabilitation Evaluation Report at October 2000 price levels. While the BCR is below unity, there is a potential for loss of life in communities surrounding the dike. This cannot be quantified nor included in the calculation.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2005)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	227,000,000		Levees	0	TBD
Estimated Non-Federal Cost	7,100,000				
Cash Contributions	0		Total Project	0	TBD
Other Costs	7,100,000				
Total Estimated Project Cost	234,100,000				
Allocation to 30 September 2004	3,548,000				
Conference Allowance for FY 2004	1,896,000				
Allocations for FY 2004	1,684,000	1/			
Allocations through FY 2005	5,232,000	2			
Allocations Requested for FY 2006	16,900,000	10			
Scheduled Balance to Complete After FY 2006	204,868,000				
Unscheduled Balance to Complete After FY 2006	0				

1/ Reflects \$198,000 reduction assigned as savings and slippage and \$14,000 rescission.

#### PHYSICAL DATA

Levees – Miles – Reach 1	22.4
Levees – Miles – Reaches 2-3	27.1
Levees – Miles – Reaches 4-8	85.3

JUSTIFICATION: The Major Rehabilitation of Reach 1 involves the construction of a cutoff wall with seepage trench, along the lakeside toe of the dike due to the existence of seepage, piping and erosion problems along the Herbert Hoover Dike system. Currently, there is a serious risk of catastrophic dike failure due to piping. Such an event, with subsequent flooding would result in extreme socio-economic and environmental damages; however, of paramount importance is the real potential for significant human suffering, including loss of life, which is not quantified in the benefit-cost analysis.

The average annual benefits are as follows:

Item	Amount
Flood Damage Reduction	<u>4,986,977</u>
Total Annual Benefits	4,986,977

FISCAL YEAR 2006: The requested amount of \$16,900,000 will be applied as follows:

Initiate Reach 1 Construction	\$ 15,264,000
Planning, Engineering, and Design	536,000
Construction Management	1,100,000
Total	\$ 16,900,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	<u>7,100,000</u>	
Total Non-Federal Costs	7,100,000	

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement (PCA) is not required for the Herbert Hoover Dike Project. There are resolutions through which the sponsor, South Florida Water Management District (SFWMD) commits to items of local cooperation. This consists of Resolutions 12 (1948) and 398(1949).

Division: South Atlantic

District: Jacksonville

Herbert Hoover Dike Major Rehabilitation, FL

7 February 2005

99

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$227,000,000 is an increase of \$2,500,000 from the latest estimate (\$224,500,000) submitted to Congress (FY2004). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 3,834,000
Schedule Changes	(604,000)
Design Changes	(730,000)
Total	\$2,500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The draft Environmental Impact Statement (EIS) for the project was completed December 1998. A draft Supplemental EIS was prepared and completed in January 2005.

OTHER INFORMATION: Supplemental reports will be prepared to review seepage and stability in other reaches of the dike. Preliminary analyses indicate that similar construction of a seepage/drainage berm may be required in the 27-mile stretch of Reaches 2 and 3, which would completely rehabilitate the southern boundary. The plan would also implement tailwater control measures in Reaches 5 and 7, and portions of Reaches 4, 6, and 8. The total length of embankment along which tailwater control measures are proposed is 54.5 miles; therefore, the comprehensive rehabilitation plan involves some type of rehabilitation effort along 91 miles of the 143-mile long dike system.

#### SUMMARIZED FINANCIAL DATA: HHD REACH 1

Estimated Federal Cost	79,985,000
Estimated Non-Federal Cost	7,100,000
Cash Contributions	
Other Costs	7,100,000
Total Estimated Project Cost	87,085,000

REMAINING BENEFIT-REMAINING COST RATIO: 1.16 to 1 at 5 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.13 to 1 at 5 5/8 percent.

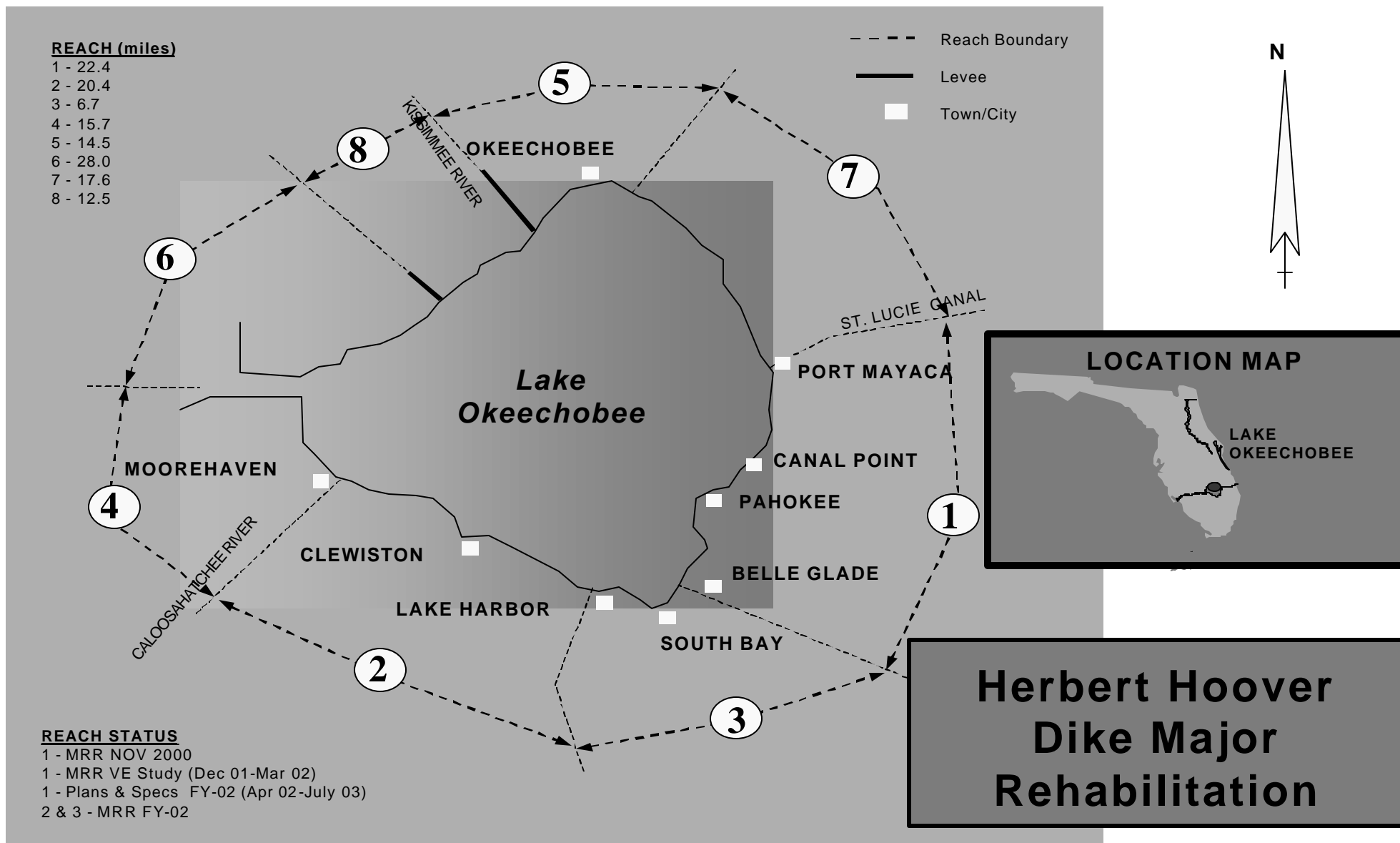
Division: South Atlantic

District: Jacksonville

Herbert Hoover Dike Major Rehabilitation, FL

7 February 2005

100





APPROPRIATION: Construction, General - Multiple Purpose Power (Major Rehabilitation)

PROJECT: Walter F. George Power Plant, AL, GA (Continuing)

LOCATION: Walter F. George Lock and Dam is located at mile 181.5 on the Chattahoochee River, 50 miles south of Columbus, Georgia, and about 84 miles southeast of Montgomery, AL. The navigation lock and gated spillway are located on the right bank of the river. The powerhouse is on the left bank, across the river from the lock, adjacent to the gated spillway.

DESCRIPTION: The plan of improvement is to refurbish the four turbines, replace exciters with solid state (static) exciters and rewind the four generators.

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, further modified by the River and Harbor Act of 1946.

REMAINING BENEFIT - REMAINING COST RATIO: 3.33 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 1.14 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 7-3/4 percent (FY 1997).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Major Rehabilitation Evaluation Report approved in August 1995 at October 1994 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement			\$31,800,000		Entire Project	75	TBD
Future Non-Federal Reimbursement			31,800,000				
Estimated Federal Cost (Ultimate)			0				
Estimated Non-Federal Cost			31,800,000				
Cash Contributions	\$	0					
Other Costs							
Reimbursements		0					
Power	\$31,800,000	31,800,000					
Total Estimated Project Cost			31,800,000				
Allocations to 30 September 2004			23,836,000				
Conference Allowance for FY 2005			6,000,000				
Allocation for FY 2005			3,843,000	1/			
Allocation through FY 2005			27,679,000	87%			
Allocation Requested for FY 2006			4,121,000	100%			
Programmed Balance to Complete After FY 2006			0				
Unprogrammed Balance to Complete after FY 2006			0				

1/ Reflects \$627,000 reduction assigned as savings and slippage, \$43,000 rescission and \$1,487,000 reprogrammed from the project.

#### PHYSICAL DATA

Rewind 4 generators  
 Replace exciters for 4 generators  
 Replace 4 turbines  
 Install SCADA system

Division: South Atlantic

District: Mobile

Walter F. George Power Plant, AL & GA

7 February 2005

103

JUSTIFICATION: The Walter F. George Powerhouse has experienced notable wear and deterioration levels since the early 1970's. The reliability has degraded faster than expected because of increased recurring cavitation problems as well as partial failure of generator coils as they approach 39 years of their 35-year life expectancy. Engineering analysis shows that these problems along with increasing generating outages can be expected to continue into the future. The result of these increased outages, as well as the reduced plant efficiencies, will be increased operation and maintenance costs, increased production costs and loss of generating revenues to the treasury. Average annual benefits for the major rehabilitation project are \$3,051,000.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Continue Construction	\$ 3,571,000
Planning, Engineering, & Design	160,000
Construction Management	390,000
<b>TOTAL</b>	<b>\$ 4,121,000</b>

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of local Cooperation		
Capital Cost allocated to power	\$31,800,000	0
Total Non-Federal Costs	\$31,800,000	0

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower costs rests with the Southeastern Power Administration pursuant to Federal law.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$31,800,000 is the same as the latest estimate presented to Congress (FY 2005).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) was prepared which addressed the expected impacts of the recommended alternative as well as other potential alternatives under consideration. The EA concluded with a Finding of No Significant Impact (FONSI). The EA and FONSI were fully coordinated with the public and State and Federal agencies. The commenting agencies concurred with the FONSI for the recommended alternative discussed in the environmental documentation. Agency comments were then incorporated into the final EA and FONSI, which were signed on 1 March 1997.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1997. The Administration recognizes the importance of funding new and continuing major rehabilitation work at aging Corps facilities that yield a high economic return per dollar invested. In conjunction with the development of the FY 2007 Budget, the Administration plans to explore ways to improve the manner in which the budget funds major rehabilitation projects at Corps hydropower, inland navigation and flood damage reduction facilities.

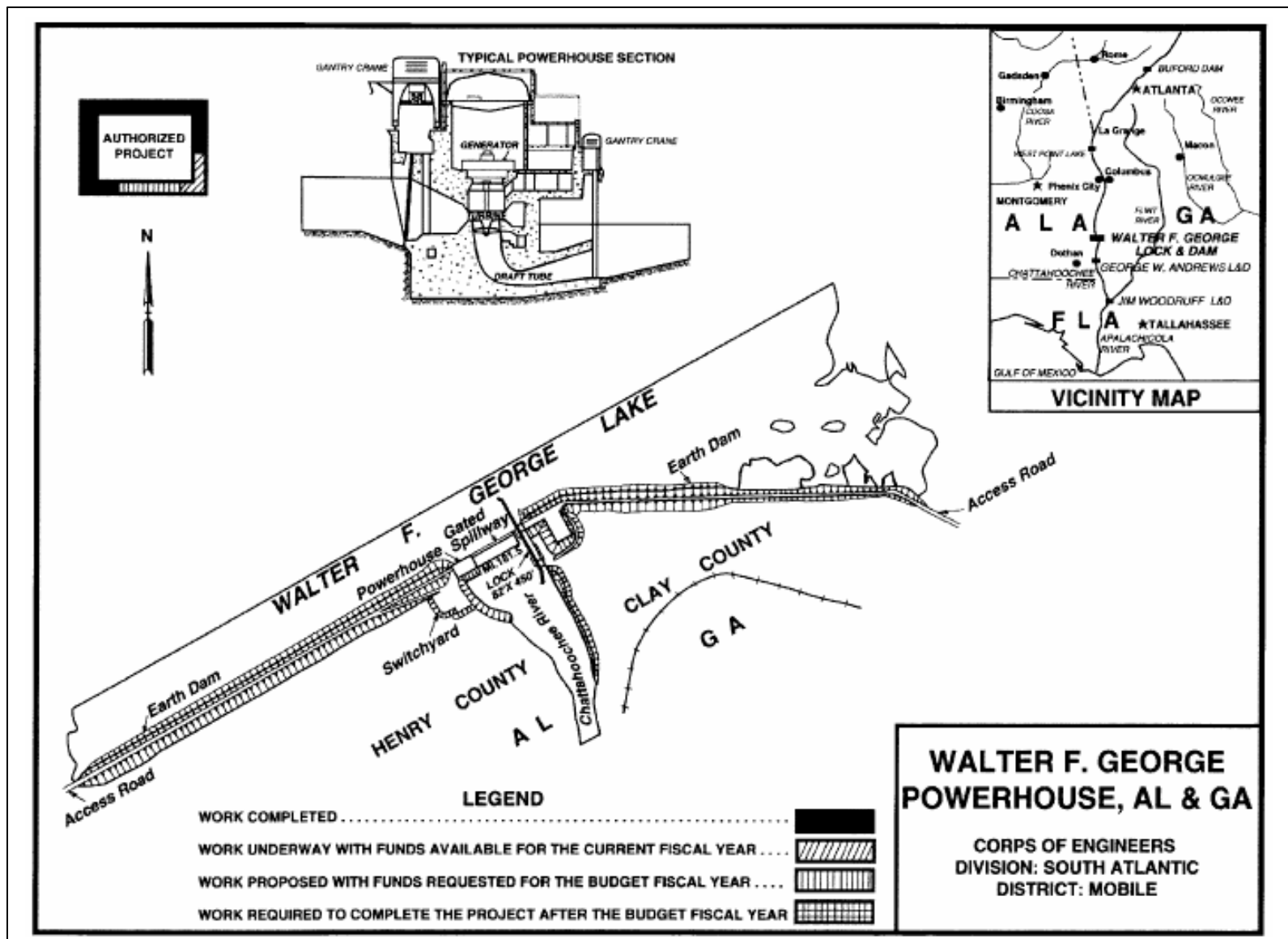
Division: South Atlantic

District: Mobile

Walter F. George Power Plant, AL & GA

7 February 2005

104



APPROPRIATION: Construction, General - Hydropower (Major Rehabilitation)

PROJECT: Buford Powerhouse, GA (Continuing)

LOCATION: The Buford Dam is located at mile 455 on the Chattahoochee River, 50 miles northeast of Atlanta, Georgia. Buford is a multiple purpose project for flood control, hydropower, recreation, and water supply. Power installation consists of two units of 40,000 kilowatts each and one small unit of 6,000 kilowatts (86,000 kilowatts total).

DESCRIPTION: The plan of improvement is to replace the three turbines and the exciters, and rewind the three generators.

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, further modified by the River and Harbor Act of 1946.

REMAINING BENEFIT - REMAINING COST RATIO: 2.06 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 1.19 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 7-5/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Major Rehabilitation Evaluation Report approved in July 1996 at October 1995 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		\$ 30,900,000		Entire Project	80	TBD
Future Non-Federal Reimbursement		30,900,000				
Estimated Federal Cost (Ultimate)		0				
Estimated Non-Federal Cost		30,900,000				
Cash Contributions	\$					
	0					
Other Costs						
	0					
Reimbursements		30,900,000				
Power	\$30,900,000					
Total Estimated Project Cost		30,900,000				
Allocations to 30 September 2004		24,452,000				
Conference Allowance for FY 2005		7,345,000				
Allocation for FY 2005		636,000	1/			
Allocations through FY 2005		25,088,000	81%			
Allocation Requested for FY 2006		5,812,000	100%			
Programmed Balance to Complete after FY 2006		0				
Unprogrammed Balance to Complete after FY 2006		0				

1/ Reflects \$767,000 reduction assigned as savings and slippage, a \$53,000 rescission, and \$5,889,000 reprogrammed from the project.

#### PHYSICAL DATA

Rewind 3 generators  
 Replace exciters with static exciters  
 Replace 3 turbines with redesigned turbines based on current hydrology  
 Install SCADA system

Division: South Atlantic

District: Mobile

Buford Powerhouse, GA

7 February 2005

107

JUSTIFICATION: The Buford Powerhouse units are 45 years old and exhibit the deterioration and wear normally expected for units of such age. Contributing factors in the reliability decline in addition to age of the units are that the generator stator coils in the two main units have decayed greatly, and the turbines are experiencing both increased recurring and progressive cavitation problems. These assessments of the Buford units, which have surpassed the mean life expectancy of 35 years, support the concern that the end of their useful life is eminent. Engineering analysis shows that these problems along with increasing generating outages can be expected to continue into the future. The result of these increased outages, as well as the reduced plant efficiencies, will be increased operation and maintenance costs, increased production costs and loss of generating revenues to the treasury. Average annual benefits to the major rehabilitation project are \$2,894,000.

FISCAL YEAR 2006: The requested amount will be applied as follows.

Continue Construction	\$ 5,042,000
Planning, Engineering, & Design	370,000
Construction Management	400,000
<b>TOTAL</b>	<b>\$ 5,812,000</b>

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of local Cooperation		
Capital Cost allocated to power	\$30,900,000	0
Total Non-Federal Costs	\$30,900,000	0

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower costs rests with the Southeastern Power Administration pursuant to Federal law.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$30,900,000 is the same as the latest estimate (\$30,900,000) presented to Congress (FY 2005).

Division: South Atlantic

District: Mobile

Buford Powerhouse, GA

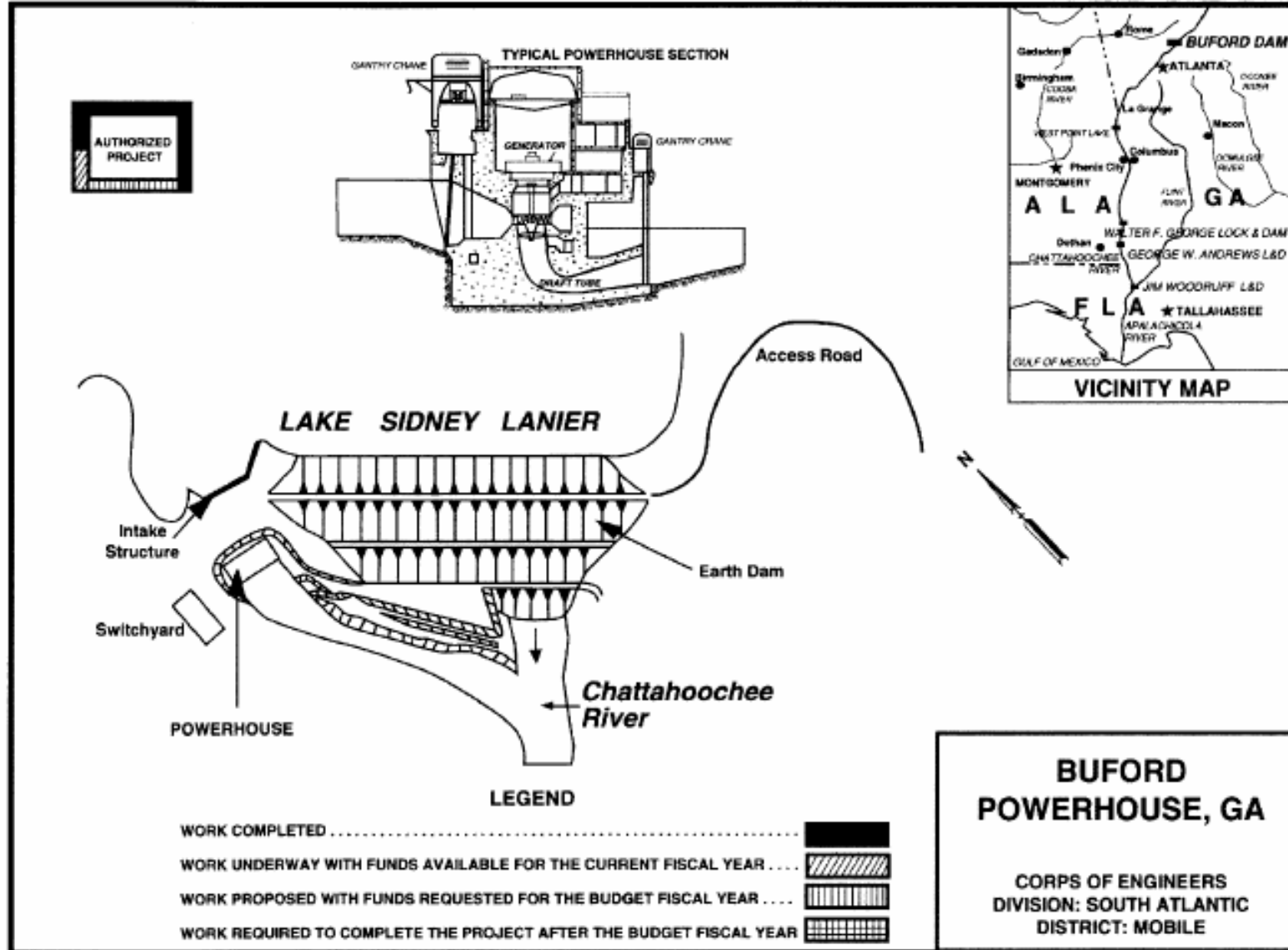
7 February 2005

108

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) was prepared which addressed the expected impacts of the recommended alternative as well as other potential alternatives under consideration. The EA concluded with a Finding of No Significant Impact (FONSI). The EA and FONSI were fully coordinated with the public and State and Federal agencies. The commenting agencies concurred with the FONSI for the recommended alternative discussed in the environmental documentation. Agency comments were then incorporated into the final EA and FONSI, which were signed on 7 March 1996.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1998. The Administration recognizes the importance of funding new and continuing major rehabilitation work at aging Corps facilities that yield a high economic return per dollar invested. In conjunction with the development of the FY 2007 Budget, the Administration plans to explore ways to improve the manner in which the budget funds major rehabilitation projects at Corps hydropower, inland navigation and flood damage reduction facilities.





APPROPRIATION TITLE: Construction, General - Multiple Purpose Power (Major Rehabilitation)

PROJECT: Hartwell Lake Powerhouse, Georgia and South Carolina (Continuing)

LOCATION: The project is located on the Savannah River, 89 miles north of Augusta, Georgia and 305 miles north of the mouth of the river.

DESCRIPTION: The recommended plan involves the rewinding of four generator units, the refurbishment of the four older turbines, and the replacement of key electrical/mechanical peripheral equipment to improve the overall reliability of the project, to reduce operation and maintenance costs, and to reduce unscheduled outages and repair costs. All work is programmed.

AUTHORIZATION: Flood Control Act approved 17 May 1950 and Flood Control Act approved 3 July 1958.

REMAINING BENEFIT - REMAINING COST RATIO: 4.9 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 1.36 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 3.1 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Evaluation Report for New Major Rehabilitation forwarded to HQUSACE in July 1993 at 1993 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	32,457,000		Entire Project	94	TBD
Future Non-Federal Reimbursement	32,457,000				
Estimated Federal Cost (Ultimate)	0				
Estimated Non-Federal Cost					
Cash Contributions	0				
Reimbursements	32,457,000				
Unprogrammed Construction					
Cash Contributions	0				
Other Costs	0				
Total Estimated Project Cost	32,457,000				
Allocations to 30 September 2004	30,823,000				
Conference Allowance for FY 2005	733,000				
Allocation for FY 2005	651,000	<u>1/</u>			
Allocations through FY 2005	31,474,000	97%			
Allocation Requested for FY 2006	733,000	99%			
Programmed Balance to Complete after FY 2006	250,000				
Unprogrammed Balance to Complete after FY 2006	0				

1/ Reflects \$77,000 reduction as savings and slippage and \$5,000 rescission.

# PHYSICAL DATA

Rewind Generators	4
Refurbish Turbines	4
Replace Peripherals	4

JUSTIFICATION: The Hartwell Powerplant, which was initially placed into operation in 1962, has over recent years, suffered from frequent unanticipated powerplant shutdowns, an increased level of O&M costs for repair and routine maintenance, and a general decrease in hydropower capacity and power production. These problems have been linked to a once-acceptable practice of running the generators for extended periods of time at levels well past their rated capacity, which was necessary to provide power needs. The proposed plan of improvement will replace the windings of four generators to state-of-the-art condition and replace key turbine and electrical/mechanical components to allow an increase in hydropower capacity to be made available to the power marketing agencies. The plan of improvement will arrest the further degradation of the hydroelectric units, decrease operation and maintenance costs, improve the powerplant's overall reliability and increase the power generation capability. Average annual benefits for hydroelectric power are \$3,354,600.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Continue rehabilitation of Powerplant	608,000
Engineering Design during Construction	25,000
Construction Management	100,000
Total	\$733,000

NON-FEDERAL COST: The costs allocable to power are reimbursable and will be reviewed and adjusted based on construction costs as the project becomes operational. As applicable, the non-Federal sponsor must comply with the requirements listed below:

Requirements of local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities.	32,457,000	120,000
Total Non-Federal Costs	32,457,000	120,000

Division: South Atlantic

District: Savannah

Hartwell Lake Powerhouse, GA & SC

7 February 2005

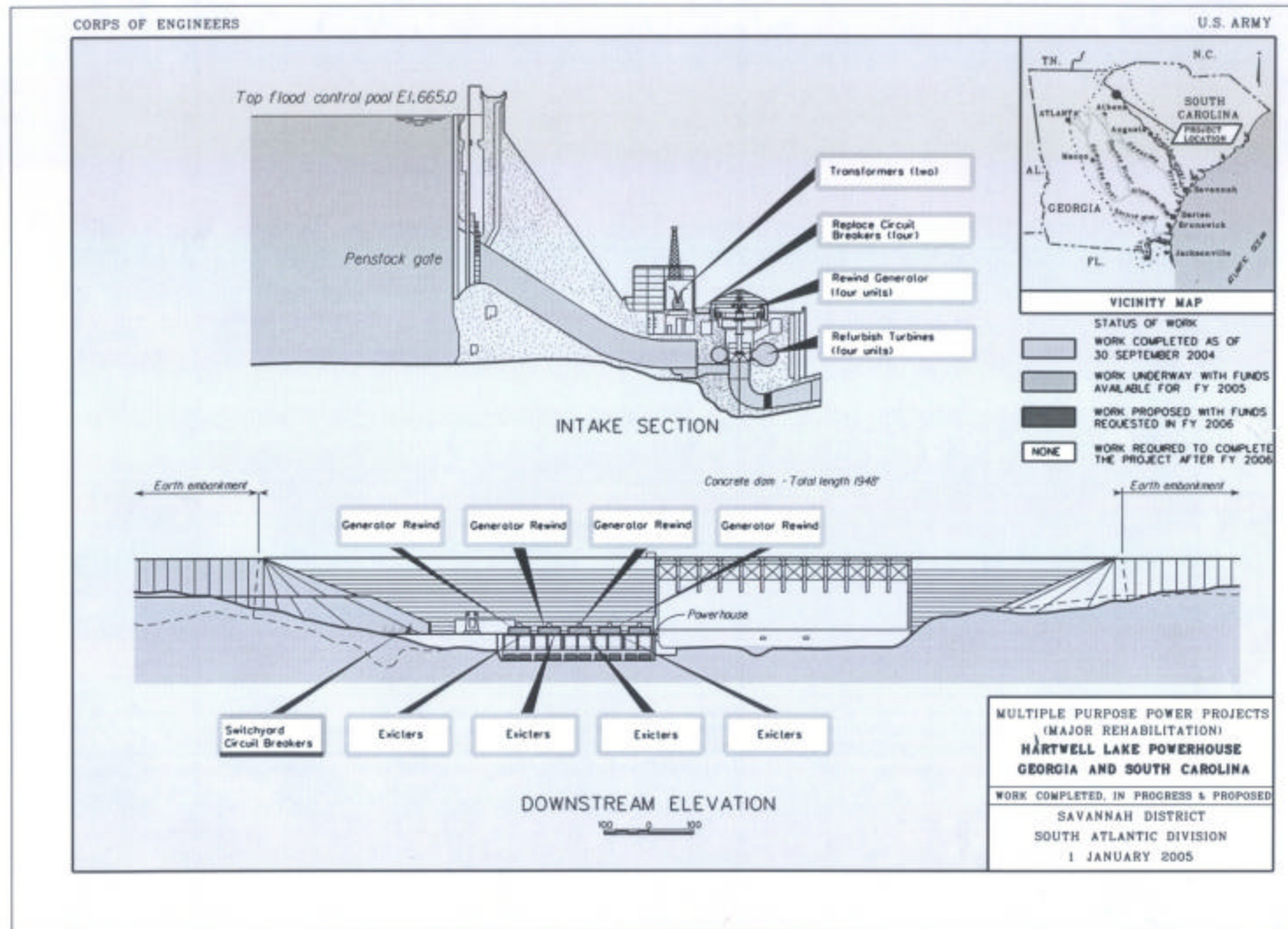
113

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower cost rests with the Southeastern Power Administration pursuant to Federal laws.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$32,457,000 has not changed.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Based on the environmental analysis contained in the Evaluation Report dated July 1993, an Environmental Assessment with a FONSI has been completed and is contained in the FY 1995 Major Rehabilitation Program, Hartwell Powerplant Evaluation Report.

OTHER: Funds to initiate construction were appropriated in FY 1996. The Administration recognizes the importance of funding new and continuing major rehabilitation work at aging Corps facilities that yield a high economic return per dollar invested. In conjunction with the development of the FY 2007 Budget, the Administration plans to explore ways to improve the manner in which the budget funds major rehabilitation projects at Corps hydropower, inland navigation and flood damage reduction facilities.



APPROPRIATION TITLE: Construction, General - Multiple Purpose Power (Major Rehabilitation)

PROJECT: Thurmond Lake Powerhouse, Georgia and South Carolina (Continuing)

LOCATION: The project is located on the Savannah River, 22 miles north of Augusta, Georgia and 216 miles north of the mouth of the river.

DESCRIPTION: The recommended plan involves the rewinding of seven generator units, the replacement of the turbine rotating parts, and the refurbishment or replacement of key peripheral equipment in order to improve the overall reliability of the project, to reduce operation and maintenance costs, to reduce unscheduled repair costs, and to provide additional hydropower capacity, power revenues and environmental improvements. All work is programmed.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT - REMAINING COST RATIO: 3.8 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 1.3 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Evaluation Report for New Major Rehabilitation Project forwarded to HQUSACE in March 1994 at February 1994 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	69,700,000		Entire Project	77	TBD
Future Non-Federal Reimbursement	69,700,000				
Estimated Federal Cost (Ultimate)	0				
Estimated Non-Federal Cost					
Cash Contributions	0				
Reimbursements					
Power	69,700,000				
Total Estimated Project Cost	69,700,000				
Allocations to 30 September 2004	53,126,000				
Conference Allowance for FY 2005	4,000,000				
Allocation for FY 2005	3,553,000	<u>1/</u>			
Allocations through FY 2005	56,679,000		81%		
Allocation Requested for FY 2006	5,700,000		89%		
Programmed Balance to Complete after FY 2006	7,321,000				
Unprogrammed Balance to Complete after FY 2006					

1/ Reflects \$418,000 reduction as savings and slippage and \$29,000 rescission.



# PHYSICAL DATA

Rewind Generators	7
Replace Turbines	7
Replace Peripherals	7

JUSTIFICATION: The J. Strom Thurmond Powerplant, which was initially placed into operation in 1954, has shown signs of excessive wear of the generators, the peripheral equipment and the turbines. This has resulted in a loss of efficiency, reduced reliability of the units and lost power output for the units. The proposed plan of improvement calls for rewinding the generators to maximum capacity, replacement of the turbine runners, and the replacement or refurbishment of key electrical/mechanical peripheral equipment. The plan of improvement will arrest the further degradation of the hydroelectric units, decrease operation and maintenance costs, improve the powerplant's overall reliability, and increase the power generation capability and partially restore some of the environmental impacts of the dam and powerplant. Average annual benefits for hydroelectric power are \$7,890,000.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Continue Rehabilitation of Powerplant	5,000,000
Planning, Engineering and Design	375,000
Construction Management	325,000
Total	\$5,700,000

NON-FEDERAL COST: The costs allocable to power are reimbursable and will be reviewed and adjusted based on construction costs when the project becomes operational. The non-Federal sponsor must comply with the requirements listed below:

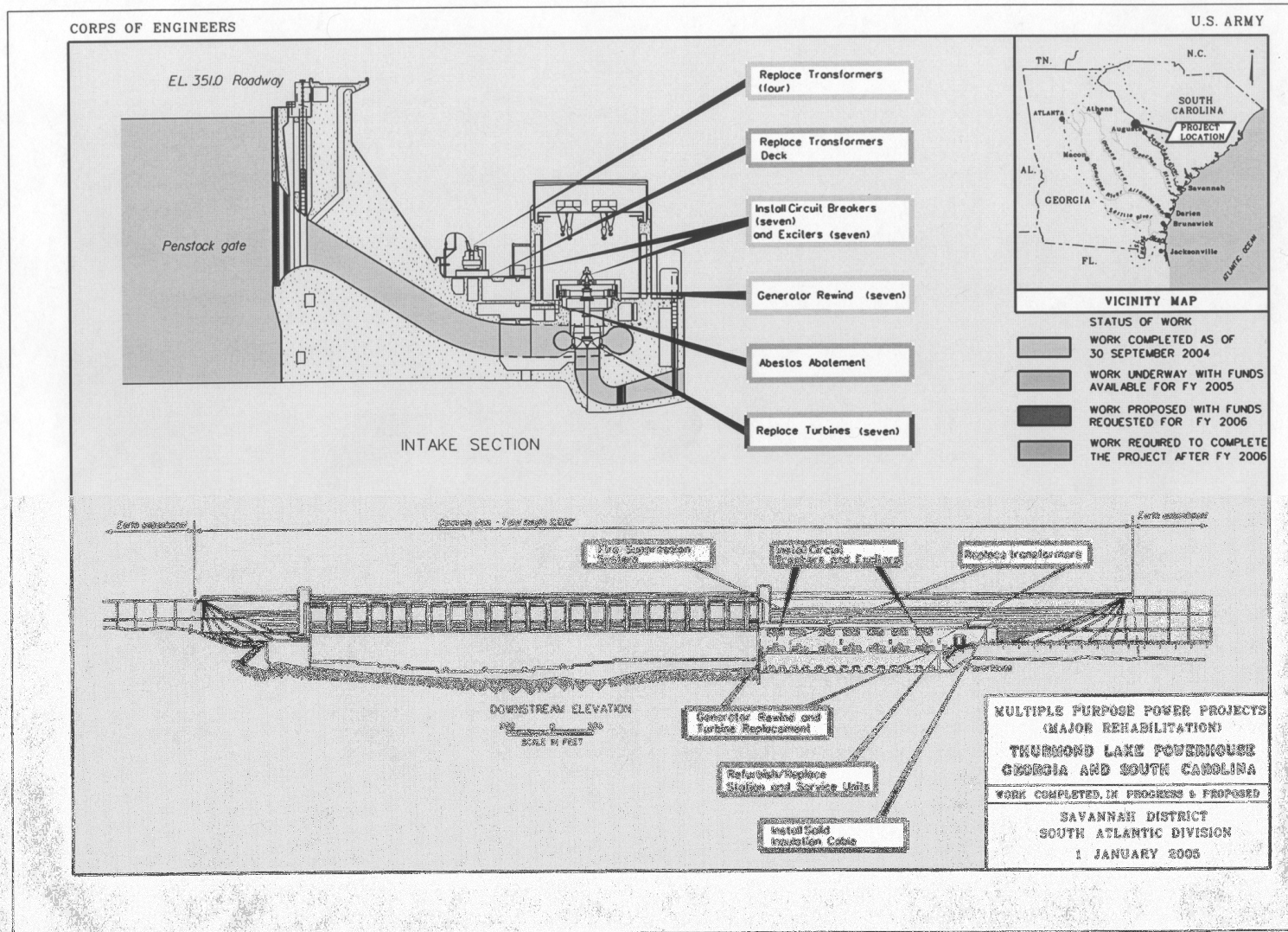
Requirements of local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities.	69,700,000	485,000
Total Non-Federal Costs	69,700,000	485,000

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower cost rests with the Southeastern Power Administration pursuant to Federal laws.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$69,700,000 is the same as the latest estimate presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Based on the environmental analysis contained in the Evaluation Report dated March 1994, an Environmental Assessment with a FONSI has been completed and is contained in the FY 1996 Major Rehabilitation Program, J. Strom Thurmond Powerplant Evaluation Report.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1996. The Administration recognizes the importance of funding new and continuing major rehabilitation work at aging Corps facilities that yield significant national economic benefits. The Administration recognizes the importance of funding new and continuing major rehabilitation work at aging Corps facilities that yield a high economic return per dollar invested. In conjunction with the development of the FY 2007 Budget, the Administration plans to explore ways to improve the manner in which the budget funds major rehabilitation projects at Corps hydropower, inland navigation and flood damage reduction facilities.



APPROPRIATION TITLE: Construction, General - Multiple Purpose Power (Major Rehabilitation).

PROJECT: John H. Kerr Dam and Reservoir, VA & NC (Continuing).

LOCATION: The Kerr Powerhouse is located on the Roanoke River in Mecklenburg County, Virginia, 7 miles east of Boydton, Virginia, 80 air miles southwest of Richmond, Virginia, and 60 air miles north of Raleigh, North Carolina.

DESCRIPTION: The recommended plan involves the rewinding of seven generator units to maximum capacity, replacement of the turbines and main power transformers, and the replacement or refurbishment of key electrical and mechanical peripheral equipment in order to improve the overall reliability of the project, reduce operation and maintenance costs, reduce unscheduled repair costs, and provide additional hydropower capacity and power revenues.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT-REMAINING COST RATIO: 4.8 to 1 at 7 1/8 percent. 5.2 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 3.4 to 1 at 7 1/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluations contained in the Major Rehabilitation Evaluation Report addendum and transmittal memorandum dated June 1997, at October 1996 price levels. Benefits were brought to current conditions of the power generation facilities and expected alternative costs in January 2005 using information from the Hydropower Design Center.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		\$76,800,000	Entire Project	22	TBD
Future Non-Federal Reimbursement		\$76,800,000			
Estimated Non-Federal Cost (Ultimate)		\$ 0			
Cash Contributions	0				
Other Costs	0				
Reimbursements	\$ 76,800,000				
Power	\$76,800,000				
Total Estimated Project Cost		\$76,800,000			
Allocations to 30 September 2004		\$ 17,150,000			
Conference Allowance for FY 2005		8,200,000			
Allocation for FY 2005		7,285,000	1/		
Allocations through FY 2005		24,435,000	32		
Allocation Requested for 2006		\$ 14,000,000	50		
Programmed Balance to Complete after FY 2006		38,365,000			
Unprogrammed Balance to Complete after FY 2006		0			

1/ Reflects \$ 856,000 reduction assigned as savings and slippage and \$59,000 rescinded in accordance with the Consolidated Appropriations Act of 2005.

#### PHYSICAL DATA

Rewind Generator	7
Replace Turbines	6
Refurbish Turbines	1
Replace Transformers	All

Division: South Atlantic

District: Wilmington

John H. Kerr Dam and Reservoir, NC & VA

7 February 2005

122

JUSTIFICATION: The John H. Kerr Powerplant, which was initially placed into operation in 1953, is showing signs of excessive wear of the generators, the peripheral equipment and the turbines. This has resulted in a loss of efficiency, reduced reliability of the units and lost power output for the units. The recommended plan of improvement calls for rewinding the generators to maximum capacity, replacement of the turbines and main power transformers, and replacement or refurbishment of key electrical/mechanical peripheral equipment. The recommended plan will improve the powerplant's overall reliability, reduce further degradation of the hydroelectric units, decrease operation and maintenance costs, and increase the power generation capability. There is growing concern with project reliability due to recent malfunctions of oil circuit breakers in the switchyard, for which repair parts are no longer available and must be custom fabricated; frequent leaks in the raw water piping system, which is in extremely poor condition throughout; and the extremely heavy cavitation observed in the runner, stay ring and discharge ring of unit #5. Average annual benefits for hydroelectric power are \$17,485,000.

FISCAL YEAR 2006: The requested amount of \$14,000,000 will be applied as follows:

Rehabilitation of powerplant	\$12,780,000
Planning, Engineering and Design	490,000
Construction Management	730,000
Total	\$14,000,000

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

Requirements of local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities	\$76,800,000	\$6,043,000

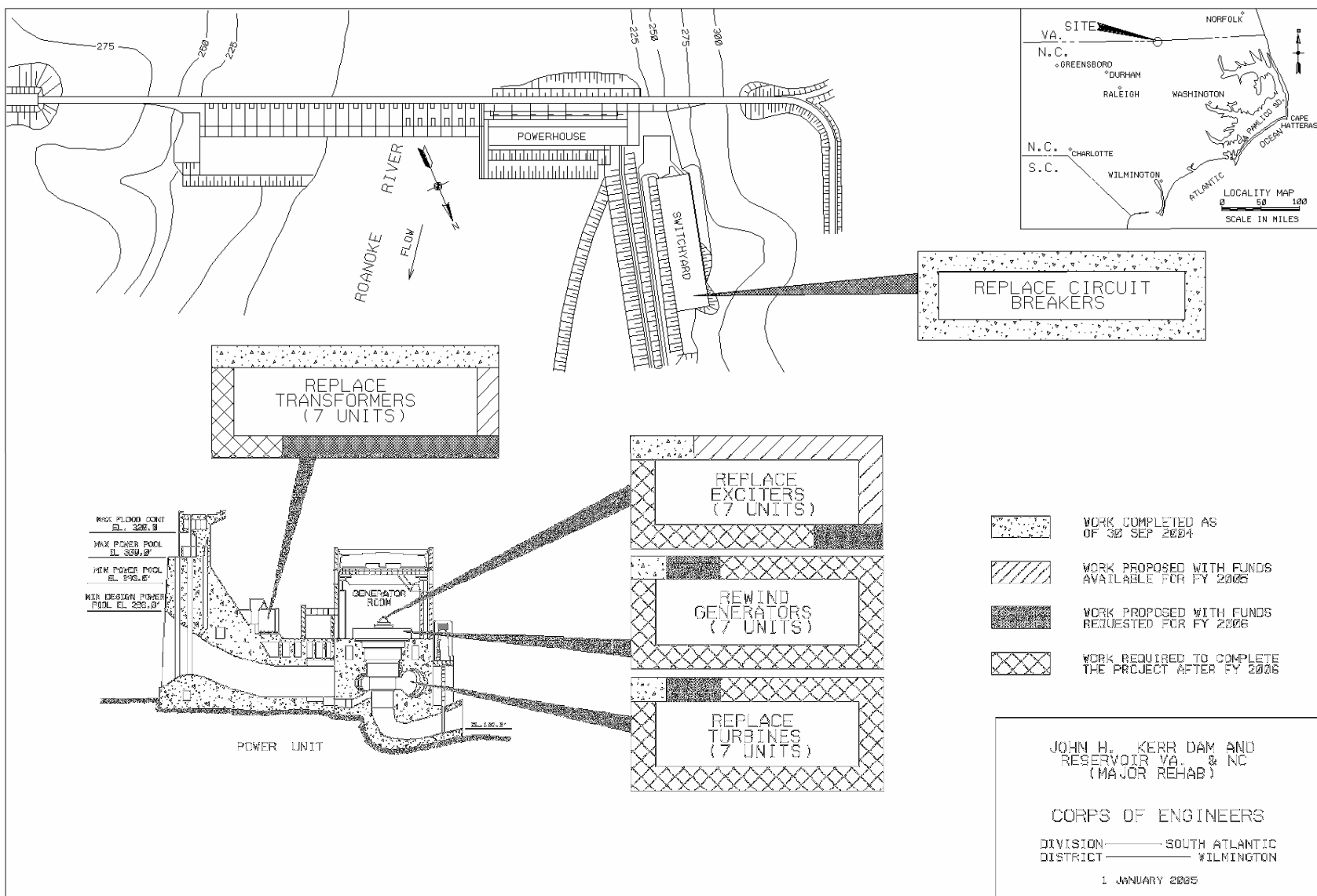
STATUS OF LOCAL COOPERATION: Pursuant to Federal Laws responsibility for repayment of hydropower costs rests with the power-marketing agency, the Southeast Power Administration.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$76,800,000 is the same as the latest estimate (\$76,800,000) presented to Congress (FY 2005). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	\$1,334,000
Authorized Modifications	700,000
Post Contract Award and Other Estimating Adjustments	-2,034,000
Total	\$ 0

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment and Finding of No Significant Impact was prepared and distributed in December 1996 for public comment. The Finding of No Significant Impact was signed by the District Engineer on 7 February 1997.

OTHER INFORMATION: The Administration recognizes the importance of funding new and continuing major rehabilitation work at aging Corps facilities that yield a high economic return per dollar invested. In conjunction with the development of the FY 2007 Budget, the Administration plans to explore ways to improve the manner in which the budget funds major rehabilitation projects at Corps hydropower, inland navigation and flood damage reduction facilities.



Division: South Atlantic

District: Wilmington

John H. Kerr Dam and Reservoir, NC & VA

7 February 2005

125



SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**1. Navigation**

**a. Channels and Harbors.** The program estimate of \$119,851,000 provides for essential operation and maintenance work on 30 channel and harbor projects named in the list, which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects. The requested amount includes an amount from the Special Fund established by WRDA96 covering 100% of the costs of operation and maintenance of dredged material disposal facilities for which fees were collected.

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u> <u>(\$)</u>		<u>Reason for Change and Major Maintenance Items</u>  (Threshold \$1,000,000)
	<u>FY 2005</u> <u>TOTAL</u>	<u>FY 2006</u> <u>TOTAL</u>	
Alabama			
Gulf Intracoastal Waterway (Mobile)	5,000,000	4,050,000	Dredging
Mobile Harbor	20,000,000	20,248,000	Dredging
Florida			
Canaveral Harbor	7,500,000	3,828,000	Dredging
Escambia and Conecuh Rivers	1,000,000	1,000,000	None
Fernandina Harbor	1,980,000	1,513,000	Dredging
Intracoastal Waterway Jacksonville to Miami	0	250,000	None
Jacksonville Harbor	6,945,000	3,637,000	Dredging

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**1. Navigation (Continued)**

**a. Channels and Harbors (Continued)**

State/Project Name	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items (Threshold \$1,000,000)
	(\$)		
	FY 2005 TOTAL	FY 2006 TOTAL	
Florida (Continuing)			
Manatee Harbor	0	2,000,000	Dredging
Miami Harbor	0	1,530,000	Dredging
Palm Beach Harbor	1,985,000	1,183,000	Dredging
Panama City Harbor	906,000	906,000	None
Pensacola Harbor	1,500,000	1,315,000	Dredging
Tampa Harbor	4,286,000	4,500,000	Dredging
Georgia			
Atlantic Intracoastal Waterway	0	286,000	None
Brunswick Harbor	3,993,000	2,396,000	Dredging
Savannah Harbor	11,687,000	13,521,000	Dredging

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**1. Navigation (Continued)**

**a. Channels and Harbors (Continued)**

State/Project Name	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items (Threshold \$1,000,000)
	(\$)		
	FY 2005 TOTAL	FY 2006 TOTAL	
Mississippi			
Gulfport Harbor	2,500,000	2,500,000	Dredging
Pascagoula Harbor	3,900,000	5,156,000	Dredging
North Carolina			
Atlantic Intracoastal Waterway	0	860,000	None
Manteo (Shallowbag) Bay	6,9700,000	7,855,000	Dredging
Masonboro Inlet and Connecting Channels	0	3,700,000	Dredging
Morehead City Harbor	4,112,000	3,575,000	Dredging
Silver Lake Harbor	0	1,540,000	Dredging
Wilmington Harbor	8,157,000	13,963,000	Dredging

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**1. Navigation (Continued)**

**a. Channels and Harbors (Continued)**

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u> (Threshold \$1,000,000)
	<u>FY 2005</u> <u>TOTAL</u>	<u>FY 2006</u> <u>TOTAL</u>	
			<b>Puerto Rico</b>
San Juan Harbor	2,000,000	1,800,000	Dredging
			<b>South Carolina</b>
Atlantic Intracoastal Waterway	0	467,000	None
Charleston Harbor	14,052,000	11,038,000	Dredging
Cooper River, Charleston Harbor	3,315,000	2,905,000	Dredging
Folly River	0	987,000	Dredging
Georgetown Harbor	1,988,000	1,342,000	Dredging
Projects Maintained Periodically	2,584,000	0	
<b>TOTAL - Channels and Harbors</b>	117,160,000	119,851,000	

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**1. Navigation (Continued)**

**b. Locks, Dams, and Canals.** The program request of \$48,956,000 provides for the operational requirements of six canalized waterways. Requirements include: operation and ordinary maintenance of project facilities; facility security, labor, supplies, materials, and parts for day-to-day functioning; and periodic maintenance, repairs, and replacements. The requested amount includes an amount from the Special Recreation Use Fees (SRUF) Special Fund for recreation areas.

State/Project Name	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items (Threshold \$1,000,000)
	(\$)		
	FY 2005 TOTAL	FY 2006 TOTAL	
Alabama			
Alabama - Coosa Rivers	549,000	1,591,000	Lock operations
Black Warrior and Tombigbee Rivers	18,377,000	22,117,000	Dredging
Alabama and Georgia			
Apalachicola, Chattahoochee and Flint Rivers	117,000	1,050,000	Lock operations
Alabama and Mississippi			
Tennessee - Tombigbee Waterway	22,354,000	20,103,000	Dredging
Tennessee - Tombigbee Waterway, Wildlife Mitigation	2,000,000	1,400,000	Wildlife mitigation

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**1. Navigation (Continued)**

**b. Locks, Dams, and Canals (Continued)**

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u> (Threshold \$1,000,000)
	<u>(\$)</u>		
	<u>FY 2005</u> <u>TOTAL</u>	<u>FY 2006</u> <u>TOTAL</u>	
Florida			
Apalachicola, Chattahoochee and Flint Rivers (see Alabama and Georgia)			
Okeechobee Waterway	3,055,000	2,060,000	Lock operations
North Carolina			
Cape Fear River above Wilmington	123,000	635,000	None
TOTAL - Locks, Dams, and Canals	46,575,000	48,956,000	
TOTAL - NAVIGATION	163,735,000	168,807,000	

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**2. Flood Control**

**a. Reservoirs.** The program request of \$8,623,000 provides for operation and maintenance of four reservoirs, including facility security, and for continuing the Alabama-Coosa River Comprehensive Water Study. The requested amount includes an amount from the Special Recreation Use Fees (SRUF) Special Fund for recreation areas.

State/Project Name	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items (Threshold \$1,000,000)
	(\$)		
	FY 2005 TOTAL	FY 2006 TOTAL	
Alabama			
Alabama-Coosa River Comprehensive Water Study	500,000	180,000	None
Mississippi			
Okatibbee Lake	1,320,000	1,680,000	None
North Carolina			
B. Everett Jordan Dam and Lake	1,915,000	1,849,000	None
Falls Lake	1,793,000	2,097,000	None
W. Kerr Scott Dam and Reservoir	2,524,000	2,817,000	None
TOTAL – Reservoirs	8,052,000	8,623,000	

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**2. Flood Control (Continued)**

**b. Reservoirs: Scheduling Reservoir Operations.** The \$170,000 requested in FY 2006 supports preparation, reviews and updating of water control manuals, real-time data collection to monitor hydrologic conditions, and the issuance of gate regulation instructions as necessary at two non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u> (Threshold \$1,000,000)
	<u>(\$)</u>		
	<u>FY 2005</u> <u>TOTAL</u>	<u>FY 2006</u> <u>TOTAL</u>	
Alabama			
Scheduling Reservoir Operations	100,000	140,000	None
Puerto Rico			
Scheduling Reservoir Operations	30,000	30,000	None
TOTAL - Scheduling Reservoir Operations	130,000	170,000	



SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**2. Flood Control (Continued)**

**c. Channel Improvements.** The \$14,315,000 requested in FY 2006 supports operation and maintenance requirements at two flood control projects. The requested amount includes an amount from the Special Recreation Use Fees (SRUF) Special Fund for recreation areas.

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>(\$)</u>		
	<u>FY 2005</u>	<u>FY 2006</u>	
	<u>TOTAL</u>	<u>TOTAL</u>	(Threshold \$1,000,000)
Florida			
Central and Southern Florida	10,559,000	14,213,000	Increase in monitoring and pumping.
Mississippi			
East Fork, Tombigbee River	170,000	102,000	None
TOTAL – Channel Improvements	10,729,000	14,315,000	

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**2. Flood Control (Continued)**

**d. Channel Improvements: Inspection of Completed Works.** The \$506,000 requested in FY 2006 supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, flood walls, drainage structures and pumping plants.

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u> (Threshold \$1,000,000)
	<u>(\$)</u>		
	<u>FY 2005</u> <u>TOTAL</u>	<u>FY 2006</u> <u>TOTAL</u>	
Alabama	50,000	50,000	
Florida	300,000	300,000	
Georgia	41,000	41,000	
Mississippi	57,000	50,000	
North Carolina	35,000	35,000	
South Carolina	30,000	30,000	
TOTAL - Inspection of Completed Works	506,000	506,000	
TOTAL - FLOOD CONTROL	19,424,000	23,614,000	

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**3. Multiple Purpose with Power:** The program request of \$124,579,000 provides for the operation requirements of 13 multiple purpose projects. Requirements include: operation and ordinary maintenance of project facilities; facility security, labor, supplies, materials, and parts for day-to-day functioning; and periodic maintenance, repairs and replacements. The requested amount includes an amount from the Special Recreation Use Fees (SRUF) Special Fund for recreation areas.

State/Project Name	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items (Threshold \$1,000,000)
	(\$)		
	FY 2005 TOTAL	FY 2006 TOTAL	
Alabama			
Millers Ferry Lock and Dam, William "Bill" Dannelly Lake	4,543,000	7,315,000	Increase in powerplant maintenance
Robert F. Henry Lock and Dam	4,590,000	7,125,000	Increase in powerplant maintenance
Walter F. George Lock and Dam	5,989,000	7,171,000	Increase in powerplant maintenance
Florida			
Jim Woodruff Lock and Dam	5,380,000	8,188,000	Increase in powerplant maintenance
Georgia			
Allatoona Lake	5,986,000	7,322,000	None
Buford Dam and Lake Sidney Lanier	9,697,000	8,519,000	None
Carters Lake	12,955,000	10,637,000	Powerplant maintenance

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**3. Multiple Purpose with Power (Continued)**

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u> (Threshold \$1,000,000)
	(\$)		
	<u>FY 2005</u> <u>TOTAL</u>	<u>FY 2006</u> <u>TOTAL</u>	
<b>Georgia (Continuing)</b>			
Hartwell Lake	12,238,000	16,619,000	Increase in powerplant maintenance
J. Strom Thurmond Lake	11,106,000	11,047,000	Powerplant maintenance
Richard B. Russell Dam and Lake	8,128,000	12,283,000	Increase in powerplant maintenance
Walter F. George L & D (see Alabama)			
West Point Lake	5,676,000	11,449,000	Increase in powerplant maintenance
<b>North Carolina</b>			
John H. Kerr Dam and Reservoir (see Virginia)			
<b>South Carolina</b>			
Hartwell Lake (see Georgia)			
J. Strom Thurmond Lake (see Georgia)			
Richard B. Russell (see Georgia)			

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**3. Multiple Purpose with Power (Continued)**

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u> (Threshold \$1,000,000)
	(\$)		
	<u>FY 2005</u> <u>TOTAL</u>	<u>FY 2006</u> <u>TOTAL</u>	
Virginia			
John H. Kerr Dam and Reservoir	11,881,000	11,513,000	Powerplant maintenance
Philpott Lake	3,905,000	5,391,000	None
<b>TOTAL - MULTIPLE PURPOSE WITH POWER</b>	102,074,000	124,579,000	

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2006

**4. Protection of Navigation.**

a. Removal of Aquatic Growth. The program request of \$2,306,000 provides for accomplishing the work essential to the eradication of aquatic plant growth for navigable waters in Florida.

<u>State/Project Name</u>	<u>ESTIMATED OBLIGATIONS</u> <u>(\$)</u>		<u>Reason for Change and Major Maintenance Items</u> (Threshold \$1,000,000)
	<u>FY 2005</u> <u>TOTAL</u>	<u>FY 2006</u> <u>TOTAL</u>	
Removal of Aquatic Growth	3,400,000	2,306,000	Reduction in removal of aquatic growth

b. **Project Condition Surveys.** The \$2,265,000 requested in FY 2006 supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the program request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that users can be advised of channel conditions and future maintenance can be scheduled.

Alabama	0	100,000
Florida	975,000	1,325,000
Georgia	71,000	90,000
Mississippi	175,000	175,000
North Carolina	227,000	226,000
South Carolina	349,000	349,000
<b>TOTAL - PROTECTION OF NAVIGATION</b>	5,297,000	4,571,000
<b>GRAND TOTAL South Atlantic Division</b>	290,530,000	321,571,000